MISSION MODE PROJECT (MMP)

CRIME AND CRIMINAL TRACKING NETWORK AND SYSTEMS (CCTNS)

IMPLEMENTATION GUIDELINES TO STATES

MINISTRY OF HOME AFFAIRS

GOVERNMENT OF INDIA

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1. INTRODUCTION TO CCTNS

The Ministry of Home Affairs has conceptualized the Crime & Criminals Tracking Network and Systems (CCTNS) project as a Mission Mode Project under the National e-Governance Plan (NeGP). This is an effort of the Government of India to modernize the police force giving top priority to enhancing outcomes in the areas of Crime Investigation and Criminals Detection, in information gathering, and its dissemination among various police organizations and units across the country, and in enhancing Citizen Services.

CCTNS aims at creating a comprehensive and integrated system for enhancing the efficiency and effective policing at all levels and especially at the Police Station level through adoption of principles of e-Governance, and creation of a nationwide networked infrastructure for evolution of IT-enabled state-of-the-art tracking system.

KEY OBJECTIVES OF CCTNS

The key objectives of the CCTNS project are as follows:

i. Provide Enhanced Tools for Investigation, Crime Prevention, Law & Order Maintenance and other functions like Traffic Management, Emergency Response, etc.
   a. Utilize IT for efficiency and effectiveness of core policing operations
   b. Provide information for easier and faster analysis

ii. Increase Operational Efficiency by:
   a. Reducing the necessity to manually perform monotonous and repetitive tasks
   b. Improving the communication e.g. Police messaging, email systems, etc.
   c. Automating back-office functions, and thereby release police staff for greater focus on core police functions

iii.   Create platforms at State and Central levels for sharing crime and criminal information/ databases across states and across the country. This would enable easy sharing of real-time information across police stations and districts at the State level and across states at the National level, there by resulting in:

    a.   Improved investigation and crime prevention

    b.   Better tracking of criminals, suspects, accused, repeat offenders, etc.

iv.   Create a platform for sharing intelligence across the states, across the country and across other state-level and GOI-level agencies

v.   Improved service delivery to the public/ citizen/ stakeholders

    a.   Access to police services in a citizen-friendly manner

    b.   Provide alternate modes of service delivery such as internet (for general requests such as NOC, for following up on status

    c.   Example ministry of external affairs, road transport

COVERAGE OF CCTNS

The CCTNS project covers all 35 states and union territories. Within the states, the 14,000+ police stations and 6,000+ higher offices (including District HQ, Range Offices, Commissionerates, State HQ, etc.)

States that have already implemented and systems of their own that achieve the goals of CCTNS could leverage the CCTNS funds for enhancing their systems with advanced applications and infrastructure. They will requisition for funds through a DPR as will be described below.

2. SERVICES TO BE COVERED

POLICE FUNCTIONS COVERED IN CCTNS

The following are the suite of proposed solutions / modules for the Police Department:

1. Registration, Investigation, and Prosecution Solutions
    a. Case Management System
    b. Criminal Information System
    c. Information Registers
    d. Trial Management System
    e. Summons and Warrants Management System
    f. Automatic Fingerprint Identification System
2. Law and Order Solutions
3. Crime Prevention Solutions
    a. Crime Analysis Tools
    b. Jail Information System
    c. Beats Management System
4. Traffic Solutions
5. Emergency Response Management Solutions
6. Reporting Solutions
7. HRMS Solutions
    a. Personnel Management
    b. Leave, TA, and other personnel related solutions
    c. Duty Allocation System
    d. Employee Grievance Management System
8. Collaboration Solutions
    a. Police Messaging System
    b. Email
    c. Bulletin Board
    d. Case Knowledge Bank
    e. News Groups
9. Citizen and External Interfacing Solutions
    a. Citizen Portal
    b. Citizen Grievance Redressal System

c. Police Service Center System

d. External Interfacing Systems to interface with Transport Department, Courts, Jails, Hospitals, Universities, Telephone Service Providers, and other external government departments to facilitate electronic exchange of information

SYSTEM COMPONENTS COVERED IN CCTNS

CCTNS includes the following components that would be provided as part of the scheme:

- CCTNS application (core application software that would be provided by MHA/NCRB to all states and its configuration, customization, enhancement and deployment at the state level)
- Hardware (PCs, peripherals, etc.)
- Communication infrastructure and Data Center
- Specialized infrastructure and solutions
- Capacity Building and Handholding
- Digitization of historical records

3. GOVERNANCE STRUCTURE IN STATES

National Crime Records Bureau (NCRB) is the central nodal agency for CCTNS. As the central agency, NCRB would:

- Define the functional scope of CCTNS and provide functional specifications to states
- Develop the core application software (CAS) and provide to states for customization and deployment; and continue to manage CAS
- Host the Central Program Management Unit (C-PMU) that coordinates and monitors the implementation of CCTNS
- Acts as a nodal point for all communications for the states

CCTNS implementation model is in alignment with the NeGP (National e-Governance Plan) guidelines of "Centralized Planning and Decentralized Implementation). Accordingly states will play the lead role in implementing the project. In order for state governments to plan and implement CCTNS in their own states, they would need to constitute appropriate governance and operations structures, and in alignment with the structures recommended by DIT, GOI.

The following governance committees, recommended by DIT shall review progress, implementation, rollout, shall monitor utilization of funds and issue Policy Directions/Guidelines for CCTNS project.

a. State Apex Committee
b. State Empowered Committee
c. State Mission Team
d. District Mission Team

The committees are to be formed as per the guidelines below. It is requested that after the states form all teams for implementation, they inform the details to MHA/NCRB.

STATE APEX COMMITTEE

This committee will be headed by the Chief Secretary and will be responsible for following:

- Review progress of project
- Monitor utilization of funds
- Issue of Policy Directions
- Issue of Guidelines etc.

The suggested composition of **State Apex Committee** is as following:

Members	Composition Suggested
Member 1 (Chairperson)	Chief Secretary
Member 2 (Co-Chair)	Principal Home Secretary
Member 3	Secretary Finance
Member 4	IT Secretary
Member 5	Head of SCRB
Member 6	Representative of NIC
Member 7	Representative of GOI, MHA
Member 8 (Convener)	Nodal Officer (CCTNS Project)
Member 9	Any other member co-opted from the field of IT, Telecom, etc.

Frequency of Meeting: Once in a quarter.

STATE EMPOWERED COMMITTEE

This Committee will be headed by the DGP and will be responsible for following:

- Allocation of funds
- Approval of BPR (Business Process Reengineering) proposals.
- Sanction for various project components, as may be specified, including the Hardware/Software procurement.
- Approval of various functionalities to be covered in the Project.
- Review progress of the Project.

- Ensure proper Training arrangements.

- Ensure deployment of appropriate handholding personnel.

- Other important policy and procedural issues.

- Guidance to State/District Mission Teams.

The suggested Composition of State Empowered Committee is as   following:

Members	Composition Suggested
Member 1 (Chairperson)	DGP
Member 2 (Co-Chair)	Head of SCRB
Member 3	Representative of NCRB
Member 4	Representative of Home Department at State level
Member 5	Representative of Finance at State level
Member 6	Director e-governance or representative of IT Department
Member 7	NIC representative at State Level
Member 8	Representative of State Implementation agency
Member 9 Nodal Officer as Convener	ADGP/IG level office as nominated by DGP
The Committee may co-opt any other member whenever, felt necessary.	

Frequency of Meeting: Once in a month

STATE/UT MISSION TEAM

The State/UT Mission Team will be headed by the Nodal Officer for CCTNS Project/Head of SCRB, whoever is senior. The State/UT Mission Team will be responsible for following:

- Operational responsibility for the Project.

- Formulating Project Proposals.

- Getting sanction of GOI for various projects.

- Hardware rollout and commissioning

- Co-ordination with various agencies.

- Resolution of all software related issues, including customization.
- Resolution of all other issues hindering the Project Progress.
- Any other decision to ensure speedy implementation of the project.
- Assist the State Apex and Empowered Committees

The suggested composition of **State Mission Team** is as following:

Members	Composition Suggested
Member 1 (Mission Leader)	Nodal Officer
Member 2	Head of SCRB
Member 3	Head of Implementing Agency
Member 4	State Informatics Officer (SIO), NIC
Nodal Officer/ Head of SCRB, whoever is senior will be the Mission Leader	

Frequency of Meeting: Once in a month.

DISTRICT MISSION TEAM

The **District Mission Team** will be headed by the SSP/SP of the respective district and will perform the following functions:

- Prepare District Project Proposal.
- Ensure proper Rollout of the Project in each selected Police Station.
- Ensure hardware and software installation, and operationalisation of the Project.
- Training of all police personnel in the District.
- Site preparation and availability of all utilities.
- Ensure separate account keeping for the Project.
- Appointment and proper utilization of handholding personnel.

The suggested composition of **District Mission Team** will have the following members:

Members	Composition Suggested
Member1 (Chairperson)	SSP/SP of the District
Member 2 (Convener) Convener	One officer of DCRB
Member 3	DIO of the NIC District Centre
Member 4	One officer from District Police having computer knowledge

Frequency of Meeting: Once in a month.

4. RELEASE OF FUNDS TO STATES

CCTNS, being a 100% centrally funded scheme, will provide all states with the required funding to run the program in the current Plan period up to 2011-12.

The scheme would finance the following components under CCTNS: CCTNS application to address the police functionality under the scope of CCTNS, procurement and installation of hardware (including PCs and peripherals), connectivity infrastructure, state-level Data Centers, site preparation and commissioning, capacity building and handholding, digitization of historical data, data migration from legacy systems (if any) and specialized applications and infrastructure (that are approved under the CCTNS scheme). These components would be provided as a "bundle of services" to be executed by a Systems Integrator at state level. Funds would be released only against the procurement of the prescribed "bundle of services" and not against the procurement of individual components thereof.

The following costs, if any, will be borne by the states: building cost, civil infrastructure, manpower costs, recurring and operational costs such as electric power, consumables, communications tariffs, etc.

During the year 2009-10, funding will be released to states for engaging a State Project Management Consultant (S-PMC) and for Capacity Building initiatives. Funding for other activities would be released only upon the selection of state level SI.

RULES GOVERNING THE RELEASE OF FUNDS

1. Funds to states would be released and would be linked to the progress of implementation at the state level and achievement of pre-defined milestones and service levels.

2. All costs related to CCTNS, capital and recurring, incurred beyond the current plan period (end of 2011-12) will be borne by the states.

3. Funds shall be released to states subject to states meeting the following conditions:

i. Enter into an agreement with GOI by signing a Memorandum of Understanding (MoU) proposed by GOI

ii. Institute the Governance Mechanism in alignment with the guidelines provided by MHA

iii. Identification of a "State Designated Agency" to act as a channel for the release of funds from GOI to states (refer to Sec. 5 for details)

iv. Agree to bear all expenses beyond the current plan period (after 2011-12)

v. Agree on achieving the outcomes and service levels defined in the scheme

vi. In case of states that have already implemented applications of their own and would like to continue with these applications, the states must demonstrate that their applications meet the key requirements of CCTNS project and that they would be able to share the data that NCRB would require of them

5. STATE DESIGNATED AGENCY

For a project of this complexity, it would be advantageous to have a "State Designated Agency", (agency/society/public sector unit) at the state level that would serve as a channel for transfer of funds from GOI to states and from state governments to the vendors implementing CCTNS. Identification of such an agency/society and routing funds through it would ensure the following:

- Timely payments for time-critical events
- Strict control on utilization of funds for intended purpose
- Sustainability even beyond plan period
- Enable States in timely hiring of experts and internal capacity building

Such a structure is also in alignment with NeGP guidelines for MMPs of similar nature (as specified by DIT, GOI).

However, recognizing also that a proliferation of societies and agencies at the state level is avoidable, states are advised not to create a new society/agency to the extent possible and instead utilize an existing society/agency/public sector unit for this purpose.

If, however, states are unable to identify such an agency, they may create a new society/agency for this purpose. This option should be considered only as a last resort and under the stipulation that there would be no post creation or capital investment.

6. STATE PROJECT MANAGEMENT CONSULTANCY (S-PMC)

Since the implementation of CCTNS and a significant part of the functionality of CCTNS application are driven by the states, states are advised to appoint a *State Project Management Consultant* to support the State Empowered Committee in the following areas (indicative only):

1. Preparation of Detailed Project Report (DPR)
2. Assisting the state in identifying the state Systems Integrator (SI):
    a. Customizing the model RFP (Request for Proposal) provided by MHA/NCRB
    b. Releasing the RFP assisting the state in managing the bid process
    c. Assisting the states with the assessment of techno-commercial appraisal of bids in identifying the state level Systems Integrator (SI)
3. Developing the functional specifications for the extensions/enhancements of CCTNS application not covered by MHA/NCRB.

Funds will be released during 2009-10 to states for engaging an S-PMC.

Guidelines (model Terms of Reference) to identify the S-PMC would be provided by the central nodal agency (NCRB on behalf of MHA) to the states.

7. CREATION OF STATE DETAILED PROJECT REPORT (DPR)

States would prepare a Detailed Project Report (DPR) with the help of S-PMC to act as a blue print for the implementation of CCTNS. The release of actual funds would be determined on the basis of C-PMU (Central PMU)'s assessment of the DPRs submitted by states.

The DPR should be appraised by the State Apex Committee/State Empowered Committees before being forwarded to MHA/NCRB for their assessment.

A model DPR would be provided to states by the central nodal agency NCRB on behalf of MHA.

8.   STATE PROGRAM MANAGEMENT UNIT (S-PMU)

In order to monitor the progress on CCTNS at the state level and to support the state CCTNS Apex Committee and Empowered Committee in managing the implementation, states would engage a state-level Program Management Unit (S-PMU).

The scope of S-PMU's work would include the following:

- Overall project planning and management in collaboration with state Empowered Committee and State/District Mission teams: includes planning, supervising the overall progress of the project, monitor conformance with the timelines, budgets and service levels.
- Review the scope and technical solutions (covering all CCTNS components) provided by the SI
- Acceptance testing and acceptance
- Perform structured transition and rollout
- Post-deployment reviews
- Confirm and monitor service levels through the engagement with the SI through periodic reviews
- Monitor the implementation of the project according to the project plan and report to the state Empowered Committee and C-PMU
- Assess the progress of the implementation and recommend release of funds to the systems integrator

Detailed guidelines for the formation of a S-PMU would be provided to states by the central nodal agency, NCRB (on behalf of MHA).

States would identify the S-PMU through a competitive bidding process.

9. PREPARATION OF REQUEST FOR PROPOSAL (RFP) FOR THE SELECTION OF STATE SYSTEMS INTEGRATOR (SI)

CCTNS adopts a "bundling of services" approach to implementation. Accordingly, all the implementation components at the state level are "bundled" and contracted out to a single Systems Integrator (SI) who would act as a single point of contact and accountability for the implementation and performance of CCTNS. The bundle of services would include the following:

1. The SI would customize and implement CCTNS core application provided by NCRB

2. The SI would develop and deploy additional functionality that is scoped under CCTNS (for some of the additional functionality, the central nodal agency would provide the functional specifications to ensure standardization across states).

3. Procurement, installation and commissioning of hardware (including PCs, peripherals, etc.) at police stations and higher offices including site preparation

4. Procurement, deployment and commissioning of communications infrastructure at all police stations and higher offices; building and commissioning of state Data Center

5. Capacity building

6. Change management

7. Procurement, configuration and commissioning of specialized infrastructure and applications as necessary

The SI would be held responsible for the outcomes of the program and their payments would be linked to the progress of the project as well as the outcomes of the program.

Each state would select a SI who would be selected by the state through a competitive bidding process.

MHA/NCRB would provide the states with a model RFP that could be used to select the SI. The states, with the help of S-PMC could customize the model RFP to their unique requirements and invite bids.

10. CAPACITY BUILDING

CCTNS would fund two key aspects of capacity building:

1. Enhancement of training infrastructure in states
2. Providing several training programs for members of police staff.

ENHANCEMENT OF TRAINING INFRASTRUCTURE

Funds would be provided to upgrade training infrastructure in police units and government training centers including SCRBx, District Police HQ, RPCTC and RTC/PTC.

The guidelines for upgrading these are provided as part of a separate note titled *Capacity Building Guidelines to States*.

TRAINING PROGRAMS TO MEMBERS OF POLICE DEPARTMENTS

The training and communications programs of CCTNS target different user categories within the state police organizations, some of which are:

- Police staff playing the roles of investigating officers, station writers, duty officers, etc.
- Station House Officers
- Senior police officers
- Police personnel who would be providing technical support to CCTNS
- Police personnel who would be providing training support to CCTNS

The training programs for different user categories would be different and would fall along four key themes, which are:

- Sensitization and Awareness Creation regarding basic ICT and Basic Computing Skills training
- Role/process specific training programs for different CCTNS user categories
- "Train the Trainer"

- Systems administrator training for members of the police staff with the required aptitude for IT

Funds will be released to states during 2009-10 for carrying out the Capacity Building activities planned for 2009-10.

Detailed guidelines in planning Capacity Building programs in states are provided as part of a separate note on *Capacity Building Guidelines to States.*

All training programs would be delivered by the SI engaged by the state.

11. GUIDELINES FOR STATES THAT HAVE MADE SIGNIFICANT PROGRESS IN POLICE SYSTEMS

States that have made significant progress in deploying police systems already and have already procured components covered in CCTNS could request funds for advanced applications and specialized infrastructure through their DPRs. They should, however, meet the following requirements:

- The state police application must meet the specifications of the CCTNS Core as detailed by the central nodal agency, NCRB (on behalf of MHA). key features and functionality of the CCTNS core
- The state must be able to provide NCRB with all the data required by NCRB according to the specifications defined by NCRB
- The states must have already procured all key components of CCTNS before requesting funds for advanced applications and infrastructure.
- The specialized applications must be approved by the MHA/NCRB to be within the ambit of CCTNS scope.

12. MONITORING AND ASSESSMENT

CCTNS shall be monitored at both central and state levels. NCRB, as the central nodal agency, would interact extensively with the states in monitoring the implementation progress at state level. It would be monitored and assessed on two key dimensions:

  i. Outcomes measurement (of the program)
  ii. Operational SLAs (of the system)

OUTCOMES MEASUREMENT

Monitoring the business outcomes of CCTNS constitutes the other key component of program assessment. This assessment indicates whether and how well the core goals and objectives of the CCTNS program are being met. The following is a list of outcomes that could be measured as part of the Outcomes impact assessment. The following list is indicative only, and will be developed over the course of the project:

Citizen Services

1. Ease of reporting petitions and complaints.
2. Level of adoption of the web interface by citizens to place their requests
3. Turn-around times for receiving responses on general service petitions such as NOC and permissions.
4. Turn-around times for receiving copies of permissible case artifacts.

External Department Services

1. Turn-around times for processing inter-departmental service requests (example: passports verification, NOC for Vehicle)

Police Department Services

1. Number of successful service requests to search and retrieve information that can aid investigations and servicing the general service requests from the central crime and criminal information repository
2. Turnaround time for providing the feedback to the field officers from the Chief Office and crime records bureau on the identified crime trends and patterns

3. Ease and turn-around time for preparing regular and ad-hoc reports on crime and criminal data in responding to requests from Chief Office, NCRB, and Parliamentary questions

4. Reduction in the proportion of time spent by police staff on non-core back office tasks

Measurements by themselves may not be actionable from a performance management perspective. Measurements provide intelligence under specific context. So it is important to set the context for measurements through appropriate benchmarking. It is also crucial to continuously review these thresholds to ensure that the measurements continue to be sources of adequate intelligence.

OPERATIONAL SLAs

Operational aspects refer to key parameters that cover the implementation and on-the-ground performance of the system and its components. They also cover the RASP (Reliability, Availability, Supportability, Performance) aspects of the system. The responsibility for ensuring performance on this count lies with the system integrators working at the state level and is monitored primarily by the S-PMU (and the C-PMU). Monitoring of these parameters is governed by the SLAs (Service Level Agreements) agreed upon between the systems integrator and the S-PMU.

These following are some of the measurable parameters that will be monitored (this list is indicative and not exhaustive; the complete list will be covered as part of Model RFP):

i. Application availability

ii. Data availability

iii. Data accuracy

iv. Network availability

v. Updation of information

vi. Functional requirements upgrade

vii. Uptime of back office servers

viii. Availability of systems at the Central Station

ix. Minimum concurrent connects at the Central Station

Etc.