Home Department

2.5 Computerisation in Police Department

Highlights

The objective of computerisation in Police Department was to store Crime and Criminal related data and retrieve the information quickly when need arises. No tangible benefits have accrued so far from the computerisation.

Lack of co-ordination between State Government and Ministry of Home Affairs has resulted in purchase of hardware for Common Integrated Police Application (CIPA) valuing Rs 2.97 crore which were lying unutilised for about one year.

(Paragraph 2.5.6.1)

The CIPA data was lying on the stand alone server of the respective Police Stations due to non-working of Bridge Software which resulted in non-availability of data either through Crime and Criminal Information System (CCIS) or CIPA on National server defeating very purpose of making available data online.

(Paragraph 2.5.7)

Lacunae in system design of CIPA software led to generation of incorrect data.

(Paragraph 2.5.8.1)

The CIPA work was managed by Police Constables only and higher ranking officers were not trained and the expenditure of Rs 38.02 lakh incurred on training remained largely unfruitful.

(*Paragraph 2.5.8.3*)

The data entry in CCIS for the years from 1998 to 2007 was not completed though 10 years had elapsed.

(*Paragraph 2.5.9.1*)

The data of CCIS and CIPA were not authenticated leading to entering same FIRs twice in the same police station, misclassification of FIRs, storage of FIRs without Act and Section *etc*.

(*Paragraph 2.5.9.6*)

Even after 21 months and spending Rs 74.87 lakh on "9 Application Software" the same was not rolled out till June 2009.

(Paragraph 2.5.10)

2.5.1 Introduction

A National project namely "Crime and Criminal Information System" (CCIS) was approved (May 1994) by the Union Cabinet for implementation across the country which was to be financed by the Government of India (GoI). The objective of the scheme was storage of Crime and Criminal related data and

easy retrieval of information for crime detection. Data were to be collected in seven forms called "Integrated Investigation Forms" (IIFs) by police stations (PSs) and sent to District Crime Records Bureaus (DCRB) for capture in the computer system. The application was made (December 2004) web enabled for easy access by National and State level officers for detection of inter district crimes and inter State crimes. CCIS database was declared (September 2005) as "National database" by Ministry of Home Affairs (MHA), GoI, which made it obligatory for the States to contribute crime/criminal data to National database.

All the 45⁶⁵ DCRBs in the State of Maharashtra were provided with computers for capturing of data which were then consolidated at the State Crime Records Bureau (SCRB) at Pune and transmitted to the National Crime Records Bureau (NCRB) for final consolidation.

With a view to build the infrastructure and mechanism to provide the basis for evolution of Crime and Criminal Information System based on Criminal Procedure Code which is uniform across the country, in a planned manner from Police Station (PS) level, the GoI introduced a Project called "Common Integrated Police Application" (CIPA). CIPA Software was designed and developed by National Informatics Centre (NIC), New Delhi in JAVA under LINUX Operating System (OS), PostgreSQL RDBMS in English language with multilingual interfaces developed for Indian languages. Main objectives of CIPA were to automate the processes at PS relating to Crime and Criminal, to provide information as and when required and to generate various statutory outputs.

In phase-1, CIPA was started (September 2007) in Maharashtra in 127 PSs of nine⁶⁶ Police Commissionerates (nine DCRBs) and in the rest of the 36 DCRBs, CCIS was in operation.

2.5.2 Organisational set-up

The Police Department of the State is headed by the Director General of Police (DGP) who functions under the administrative control of Additional Chief Secretary, Home Department. The computerisation work implemented through PSs and DCRBs was monitored by the Additional Director General/Special Inspector General of Police, SCRB, Pune.

⁶⁵ Ahemadnagar, Akola, Amravati City, Amravati Rural, Aurangabad City, Aurangabad Rural, Beed, Bhandara, Buldhana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Mumbai City, Mumbai Railway, Nagpur City, Nagpur Railway, Nagpur Rural, Nanded, Nandurbar, Nashik City, Nashik Rural, Navi Mumbai, Osmanbad, Parbhani, Pune City, Pune Railway, Pune Rural, Raigad, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur City, Solapur Rural, Thane City, Thane Rural, Wardha, Washim and Yavatmal

⁶⁶ Amravati, Aurangabad, Mumbai Railway, Nagpur, Nashik, Navi Mumbai, Pune, Solapur and Thane

2.5.3 Audit objectives

The objectives were to evaluate whether:

- \checkmark the hardware and software was used judicially and economically;
- ▶ the controls including IT security built in the IT system were adequate and to bring out the areas of risks, if any;
- ▶ the data available in the system and the information generated through the IT system was complete, accurate and reliable;
- ↘ the flow of information from Police Stations to District and State Crime Records Bureau was seamless;
- ▶ the information was made available to end users in time for decision making and monitoring and
- ∠ adequate business continuity plan and disaster recovery plan was in existence.

2.5.4 Audit criteria

The audit criteria adopted were:

- ▶ Instructions of NCRB/GoI,
- ↘ Criminal Procedure Code (Cr. PC), Indian Penal Code (IPC), Police Manuals, Bombay Police Act, rules and regulations of the Government and
- **凶** Generally accepted IT best practices.

2.5.5 Scope and methodology of audit

Implementation of Computerisation activities and policies were scrutinised in DGP office, Mumbai, SCRB Pune, 13⁶⁷ out of 45 DCRBs for CCIS and 33⁶⁸ out of 127 PSs where CIPA first phase was implemented between December 2008 and April 2009. The selection of DCRBs and PSs was done through statistical random sampling. Methodology adopted was assessment of controls by issue of questionnaires, comparing electronic data with manual records besides analysis of various modules of CIPA system. Integration of various application softwares with each other and databases created were scrutinised to check the quality and reliability of data. Entry conference was held in May 2008 with Principal Secretary (Special), Home Department at Mumbai.

⁶⁷ Nagpur City, Nagpur Railway, Nagpur Rural, Nashik City, Nashik Rural, Navi Mumbai, Mumbai City, Mumbai Railway, Pune City, Pune Railway, Pune Rural, Thane City and Thane Rural

⁶⁸ Ajni, Ambad, Badlapur, Bhosari, Borivali, Chatrapati Shivaji Terminus, Deccan Gymkhana, Deolali, Hill Lane, Jaripatka, Kalamna, Kolshewadi, Kopri, Kurla, Lakadganj, Manpada, Mumbai Central, MFC Kalyan, Navin Panvel, Nhavasheva, Nizampura, Pachpaoli, Panchavati, Pimpri, Ranapratap Nagar, Swargate, Taloja, Ulhas Nagar, Uran, Vashi, Vitthalwadi, Wanwadi and Yerwada

Exit conference could not be held and replies to the observations were also still awaited from the Government.

Audit findings

2.5.6 Procurement of hardware for CIPA

2.5.6.1 Duplication and excess procurement of hardware

Hardware is an important and costly IT asset and therefore, excess procurement should be avoided. Scrutiny of the records revealed that the department purchased hardware (servers, clients, printers, scanners, switches and modems) costing Rs 2.97 crore (February-March 2005) from the funds of Modernisation of Police Force for pilot launch of CIPA in 126 PSs of nine Police Commissionerates. Subsequently, MHA through NIC directly supplied hardware (January, February 2006) pre-loaded with CIPA software to these PSs. Meanwhile, the hardware earlier supplied to these PSs by the department which were lying idle due to non-installation of CIPA software, were withdrawn and redistributed to other offices/units of the department for office automation and CCIS. Thus, the aforesaid hardware valuing Rs 2.97 crore were lying unused for about one year.

Department accepted (April 2009) the duplication of purchase of hardware.

Central Processing Units numbering 254 with attachment of modem and fax cards having a speed of 56 Kilobytes per second (Kbps) were supplied by MHA for CIPA. It was, however, noticed that broadband connection having special modem with the high speed was also made available by the department to every PS. As such modem/fax cards became unnecessary and the expenditure of Rs 1.16 lakh incurred by MHA on their procurement became wasteful.

Every PS was equipped with two servers and three clients loaded with CIPA software and to connect all these in Local Area Network (LAN), 127 number of 16 port switches were supplied. As the Action Plan for CIPA (July 2005) envisaged eight port switches only, the expenditure incurred on account of difference in cost of 16 and eight port switches could have been avoided.

These excess and unavoidable procurement of hardware indicated lack of coordination between the State Police Department and the MHA of GoI.

2.5.6.2 Idling and underutilisation of CIPA computers

The CIPA project was implemented as a total package including supply of hardware, software, training and handholding support by appointing a single agency for all the PSs in a State. Accordingly, M/s. HCL Infosys Ltd., Puducherry was designated to supply hardware (January 2006) and manpower for training and handholding support (September 2006) by appointing Senior Technical Assistants (STA) and Technical Assistants (TA).

It was noticed in the test checked PSs that the hardware were received from January to July 2006 and were installed from February to August 2006. The

appointed STAs/TAs joined respective PSs between June and August 2007 and the operation of CIPA project was started from September 2007. Thus, the hardware was lying idle for more than 20 months from January 2006 to August 2007.

It was also noticed that out of five computers supplied to each PS for CIPA on an average, only three computers were used for CIPA. Of the balance, one computer was utilised for other office works and for availing broadband facility. This resulted in underutilisation of two computers per PS for the purpose of CIPA.

All the PSs accepted the above facts.

2.5.7 Non-working of 'Bridge' software

CCIS software was developed on Window based OS with MS-SQL as backend whereas the CIPA database was developed on Linux OS with PostgreSQL. In order to bring compatibility and to port the CIPA data to CCIS and vice versa, NIC later developed 'Bridge' software. However, the 'Bridge' software could not be successfully installed at SCRB, Pune, DCRBs Nagpur and Pune (April 2008) and NCRB and NIC, New Delhi were intimated accordingly in December 2008.

Meanwhile, SCRB, Pune directed (November 2008) nine DCRBs consisting of 127 PSs implementing CIPA to complete the backlog data entry in CCIS up to September 2007and stop further data entry in CCIS from October 2007 onwards. However, it was noticed that 26 PSs continued the data entry in CCIS till December 2008 (7,362 records) apart from entry of the same data in CIPA leading to wastage of man and machine hours.

Further, due to non-functioning of 'Bridge' software, the data from October 2007 in respect of the PSs implementing CIPA were lying on the stand alone server of CIPA in the respective PSs and could not be transferred to National server after getting ported to CCIS database. This resulted in non-availability of complete and combined data for the period from October 2007 on National server, defeating the very purpose of making available online data for investigation.

2.5.8 General controls

General controls regulate the environment in which the IT application is operated and includes disaster recovery and business continuity planning, access controls both physical and logical access and organisational issues such as segregation of duties and providing adequate training. Audit observed that disaster recovery and business continuity arrangements were inadequate and IT security practices comprising physical and logical access and environment controls, and training of staff was inadequate as brought out subsequently:

2.5.8.1 Lacunae in designing CIPA software

Analysis of the CIPA software revealed that there were many flaws/lacunae in the software as detailed below:

- ➤ There was no provision in the software to (i) rotate the scanned photos of the criminals and missing persons, (ii) accept list of all the local head of crimes;
- ➤ Due to non-inclusion of certain sections of PIT Act, Prohibition Act, Indian Arms Act *etc.*, in the list of options to classify the crime under various acts, such FIRs were shown to have been registered under different Sections or without entering such details;
- ↘ In the Investigation module under 'Finger prints sent to Finger Print Bureau (FPB)' option, the names of FPB offices in Mumbai and in the State of Maharashtra were not included in the list provided in drop down menu;
- ▶ The title of 'Zero' FIR was incorrectly mentioned as FIR transferred from other PSs instead of FIR transferred to other PSs resulting in non-feeding of such cases in the system;
- ➤ Entries made in the station diary regarding arrest of criminals, seizure of property, registration were also required in "Registrations", "Arrest", "Investigation", "Prosecution" modules of CIPA. However, in CIPA, these data was entered in the Station Diary in text format and hence could not be captured in all the modules separately. This had resulted in duplication of work which consumed time;
- ❑ Data entry in the "Registration" module was required to be done as per the chronological order of the Station Diary and the operator had to enter Station Diary number and date. However, the system allowed data entry of subsequent numbers without the data entry of earlier ones and did not prompt to the user the missing diary number, if any, at the time of recording subsequent event. Hence, if the user had missed the sequence, only option available to the user was to reload the earlier backup and re-enter the entire data from the date of last backup as there was no facility to insert the missing data;
- ↘ There was no provision in the software to auto freeze the FIR after a defined period of time as in CCIS software where FIRs were automatically frozen after 24 hours. This increases the possibility of manipulation in FIRs in CIPA system.

2.5.8.2 Inadequate IT Security practices

Considering the vulnerability of IT systems to various threats, it was necessary to (i) identify the risk involved in the system; (ii) identify critical data which would need enhanced security; (iii) define a security policy which would ensure confidentiality, integrity and availability of data and (iv) documentation of the security policy.

Audit noticed that the Police Department did not formulate any security policy. The following points were also observed:

- ▶ Change of passwords at periodical intervals was not made mandatory and there was no restriction on the length of the passwords used.
- ➤ Though the security levels required for handling the sensitive/critical modules of CIPA were identified, it was not followed as the persons other than Investigating Officers (IO) were entering the data which was supposed to be entered by the IO by logging in with IO's username and password. Also, all the data entry level users in a PS were logging in with the same username and password.
- ➤ Backups of the data were not taken on regular intervals as guidelines in this regard were not issued by SCRB. Registers to record and monitor the backups were also not maintained and there was no system of storing the backup off-site as the users were not trained to take backups on other storage devices and the backups were stored in the same server where the data was stored.
- ▶ Due to load shedding, the system could not be operated for about four to five hours in a day in Nagpur, Nashik and Navi Mumbai Commissionerates.

All the test checked PSs accepted (March 2009) the aforesaid facts.

There was no provision in the CIPA software to delete the FIRs once generated through the system. Audit analysis of the database, however, revealed that in 11^{69} PSs, 229 FIRs were missing. Since all users were logging in with the same username and password and in the absence of adequate audit trail, the users who had deleted the FIRs and the reasons thereof could not be ascertained.

On this being pointed out, all the PSs stated that this was done due to oversight and the matter would be taken up with the higher authorities.

The reply was not acceptable as FIR being sensitive and important record, more care should have been taken by the department in the absence of sufficient audit trails.

2.5.8.3 Inadequacy of trained manpower and ineffective training

It was observed that the availability of trained persons in PSs was very low, the CIPA work was done by Police Constables (PCs) only and higher ranking officers were not involved. The trained PCs were also assigned other policing duties. Consequently, the data entry work got delayed and back log data entry could not be completed as commented in paragraph 2.5.9.7.

Though, one STA per commissionerate at Rs 18,700 per month per person for a period of one year and one TA for every PS at Rs 13,200 per month per person, for a period of six months were deployed by HCL to impart on-job

⁶⁹ Bhosari, Hill Lane, Kalamna, Kolsewadi, Lakadganj, Manpada, MFC Kalyan, Pachpaoli, Ranapratap Nagar, Uran and Wanwadi

training on standard Office Automation Software and the CIPA software, it was observed that the officials of PS were not able to handle CIPA without the technical support because either no training or incomplete training was given by the STAs/TAs.

Thus, the department failed to utilise the services of STA/TA and the expenditure of Rs 38.02 lakh incurred on hiring of STA/TA in test checked six⁷⁰ Commissionerates and 31 PSs largely remained unfruitful.

2.5.8.4 Inadequate documentation policy

Though CIPA user manual and guide were available on web site but any of the test-checked PSs did not have the same. In the absence of these documents, the users were unable to solve the difficulties faced by them.

2.5.9 Application Controls

Application controls ensure that the transactions are carried out according to the business rules of the organisation. These controls include input controls and validation checks to make the data complete, accurate and reliable.

2.5.9.1 Incomplete data entry in CCIS

Form-1 of IIFs namely First Information Report (FIR) provides preliminary information about the crime, Form-2 Crime Details Form (CDF) provides information regarding type of crime, type of property stolen and motive of crime, Form-5 Final Report Form (FR) provides details of chargesheet filed against the accused. Data entered in these forms was critical and all other forms such as property seizure, arrested person details, court case details *etc.*, were subsidiary to these forms.

Analysis of the database of the selected 12 DCRBs (except Mumbai city where data was stored in three different servers and not consolidated) revealed that the average percentage of data entry of FIR, CDF and FR were 83.37, 66.79 and 45.88 respectively. This indicated that the data entry for the years from 1998 to 2007 was yet to be completed. As capture of the critical data remained incomplete, the very objective of making CCIS data available for easy retrieval of information in support for crime detection was defeated.

The DCRBs stated that shortage of manpower and assignment of policing duties to the users of CCIS hampered the data entry work.

2.5.9.2 Non-use of web enabled CCIS database

SCRB, Pune intimated (January 2006) all DCRBs to make use of Nation-wide database of CCIS on NCRB website as and when required for investigation and other related purposes and each DCRB was allotted user ID and password. PSs could approach the respective DCRBs for information from the Nation-wide data.

⁷⁰ Mumbai Railway, Nagpur, Nashik, Navi Mumbai, Pune and Thane

It was noticed that the number of hits recorded during January 2006-December 2008 in respect of test checked DCRBs on website of the NCRB ranged between 546 and 606 only indicating meagre usage of the data base. It was also observed that no registers were maintained in selected DCRBs to monitor the requests from the IO, other law enforcement agencies and related organisations and supply of information thereon. Moreover, completeness and quality of information available on NCRB server was not good as commented in paragraph 2.5.9.6.

DCRBs replied that the CCIS database would be effectively utilised in future.

It was, thus, clear that CCIS database was not effectively used defeating the very purpose for which the database was created since 1998.

2.5.9.3 Non-installation of latest version of CIPA

The latest version (1.16 b) of CIPA was released (December 2008). However, it was noticed that test checked PSs were using version 1.11/1.14 of CIPA software (January-March 2009) owing to various problems in the latest version. This indicated deficient testing and acceptance procedures adopted by NIC/Department while updating the version of the CIPA software.

2.5.9.4 Duplication of work

The objectives of CIPA software were significant reduction in manual records/registers maintenance, elimination of duplicate and inconsistent record keeping and generation of various reports required from time to time.

Scrutiny of the records in all the selected PSs revealed that though provision was available in the system, no MIS reports were generated through CIPA software and manual written copies of FIR were continued to be issued instead of system generated FIRs to the complainants (March 2009).

The reasons for the above were attributed to non-receipt of directions from higher authorities regarding online issue of FIR, shortages of printing stationery, cartridges and shortage of trained manpower.

The objectives of CIPA to automate the processes at PSs were not achieved. On the contrary, there was wastage of more manpower besides duplication of work.

2.5.9.5 Vital information on criminals missing

CCIS had provision to store identity of criminal but no provision was made for storage of photographs or fingerprints which were more precise and unique identities. Though CIPA software was developed with such provisions to store photographs/finger prints, the same was not captured in the database by all PSs implementing CIPA except Mumbai Railway PSs.

2.5.9.6 Inadequate input control and non-reliability of CCIS/CIPA data

The data related to crime and criminal being crucial and of utmost importance should be accurate, reliable and authentic. SCRB directed (April 2006) all DCRBs to check the data in respect of IIFs to avoid incorrect feeding. Audit analysis of the database revealed that the data was not authenticated leading to storage of incorrect data as can be seen from the following observations:

Same FIRs entered in the database of two Police Stations

In CCIS, data entry in respect of IIFs of each Police Station is done at DCRB. Out of test checked DCRBs in five⁷¹ DCRBs, it was noticed that in 48 cases, though the content of FIRs were same, these FIRs were entered in two PSs as the operators failed to set the location of Police Station (name of Police Station).

Same FIRs entered twice in the same Police Station

No facility for auto generation of FIR numbers was available in the CCIS software. Hence the users were required to manually enter the FIR numbers. However, it was noticed that 66 FIRs were entered twice with two different numbers in the same PS under eight⁷² DCRBs.

In CIPA, though there was facility to auto generate FIR numbers, in 12 cases (five⁷³ PSs), same FIRs were entered with two different numbers.

These indicated user level mistakes and absence of supervisory check.

Misclassification of FIRs in database

The FIRs were given running serial numbers as per the category to which crime pertains *i.e.*, (i) Class I to V (Major crimes) FIR numbers from 1 to 3000, (ii) Class VI (other crimes) from 3001 to 6000 and (iii) Prohibition cases from 6001 to 9999. Analysis, in five⁷⁴ DCRBs revealed that 35 FIRs were misclassified in the CCIS database and saved under wrong category as the software lacked auto generation of FIR numbers and validation checks as regards display of Acts and Sections relevant to the respective category of crimes were found inadequate.

FIR Numbers generated more than the last FIR registered

FIR registered in the PS in each year, was given number in sequential and chronological order under each category and later on entered in the database. In absence of facility in CCIS software to generate FIR numbers in sequential order and lack of supervisory check, FIR numbers allotted by the users in an

⁷¹ Nagpur City, Nagpur Railway, Nagpur Rural, Nashik City and Nashik Rural

⁷² Nagpur City, Nagpur Railway, Nagpur Rural, Nashik City, Nashik Rural, Pune Rural, Thane City and Thane Rural

⁷³ Jaripatka, Kalamna, Manpada, Pachpaoli and Taloja

⁷⁴ Nagpur City, Nagpur Rural, Nashik City, Nashik Rural and Thane Rural

adhoc manner in 60 cases of five⁷⁵ DCRBs, which was more than the last FIR number registered as per the manual registers.

In the CIPA software, since FIR numbers were generated automatically in a running serial number, alteration in this number was not possible. However, analysis of CIPA data revealed that in 144 cases of 14⁷⁶ PSs, FIR numbers were not allotted in a sequential order and numbers allotted were more than the last FIR number registered as per manual records in the respective PSs.

FIRs stored without Acts and Sections

There was provision in the CCIS software to save the FIRs with reference to the relevant Act and Sections. However, analysis of the database maintained at SCRB, Pune revealed that 3,956 FIRs from 1998 to 2008 were entered without indicating relevant Acts and Sections.

In CIPA software also, 22 FIRs of four⁷⁷ PSs for the years 2007 and 2008 were entered without Acts and Sections and in 10 FIRs of two⁷⁸ PSs, no details other than FIR numbers were entered.

This showed that the inadequate input controls employed in the software which allowed saving of FIRs without critical information like Acts and Sections.

Incorrect classification of Acts and Sections

The master data should not contain dummy and irrelevant data, as it forms the basis for creation of authentic and reliable database. It was seen that the master data relating to Acts and sections contained sections which were not relevant to their corresponding Acts. For example, data base contained the following irrelevant sections 00FA, 00MA, 00MP, 00PF, 00UD, A-B and 00WB under Indian Penal Code, 1860. This resulted in creation of incorrect records of 102 FIRs on the SCRB server with the aforesaid sections.

Data entry in excess of Crimes actually registered

Analysis of the CCIS database maintained in six⁷⁹ DCRBs revealed that the data entry of FIRs, CDFs and FR forms were done in excess of actual FIRs registered during a particular year due to non-reconciliation with the manual records and absence of control totals combined with supervisory checks.

On this being pointed out, DCRBs stated that due to oversight of the operators data entry mistakes were committed. Further, DCRB, Thane Rural reported to SCRB (May 2008) data entry mistakes in 1,560 records for the period 1998 to 2008 which confirmed non-authentication of data.

⁷⁵ Nagpur Railway, Nashik City, Nashik Rural, Pune Rural and Thane Rural

⁷⁶ Bhosari, Jaripatka, Kalamna, Kopari, Manpada, Mahatma Phule Chowk Kalyan, Navin Panvel, Nhava sheva, Pachpaoli, Panchvati, Taloja, Uran, Wanwadi and Yerwada

⁷⁷ Ajani, Bhosari, Hill Lane and Pachpaoli

⁷⁸ Nhavasheva and Uran

⁷⁹ Mumbai Railway, Nagpur City, Nagpur Railway, Pune Railway, Thane City and Thane Rural

Misclassification and incorrect value of property in CIPA

There was provision in the software to capture the details of property such as type of property, its value in the FIR. Analysis of the database revealed that in six^{80} PSs, the total value of property entered in database was Rs 1.55 crore as against the actual value of Rs 19.86 lakh as recorded in the manual FIR.

The options in the drop down menu regarding details of 'Property' type in FIR form were displayed in English and Hindi instead of Marathi, the local language. This has resulted in selecting wrong option under 'Property' category in 58 records of 13⁸¹ PSs.

The PSs accepted the data entry mistakes. This showed that the data was not authenticated by any responsible supervisory officer.

2.5.9.7 Output control

CCIS software

The quantity of FIRs entered in the database of CCIS could be viewed in 'Data Quantity Report' and completeness thereof in 'Data Quality Report' generated from report menu. There should be no difference in the figures of FIRs in these two reports generated from the same database. It was, however, noticed in six DCRBs, number of FIRs as per Data Quantity Report and Data Quality Report was 4,08,902 and 4,09,413 respectively. The total number of FIRs as per manual registers agreed with the Data Quantity Report. This indicated incorrect generation of MIS in respect of Data Quality Report.

CIPA software

It was noticed that in five⁸² PSs under Mumbai Railway DCRB, data entry was made in all the Integrated Investigation Forms and other modules of CIPA, but in rest of the test checked 28 PSs, data relating to IIF-1 was only being entered and details were not entered in any other IIFs and modules since September 2007.

Analysis of the CIPA software revealed that in the following reports, expected output was not generated.

↘ In the report of 'Arrest Accused Register', information of all the accused arrested under various Sections of Indian Penal Code, Criminal Procedure Code –Section 109 and 110, Bombay Police Act, 1951 and Juvenile Justice Act were shown together. There was no separate report for the accused arrested for major crimes/local crimes for which FIRs were registered under category I to V and VI. These reports were generated manually;

⁸⁰ Deccan Gymkhana, Hill Lane, Kopri, Lakadganj, Pachpaoli and Panchavati

⁸¹ Ajani, Ambad, Borivali, CST Rly., Jaripatka, Kalamna, Kurla, Lakadganj, Mumbai Central Railway, Pachpaoli, Panchavati, Ranapratap Nagar and Ulhasnagar

⁸² Borivali, CST, Kurla, Mumbai Central and Vashi

- ↘ In the report of 'Bail Register', details of bail amount received were not reflected;
- ▶ In the Conviction Report, the information of the punished accused were not shown though the same was fed;
- ↘ In the Register of 'Missing Persons', if the missing person was found and details thereof were fed, details of person to whom the missing person was handed over were not reflected in the report though the same were fed;
- ↘ The report generated in the 'Accidental Death Register (ADR)' module showed no details of 'Brief description of occurrence' though the information in this regard was fed;
- \checkmark In the 'Post Mortem Register' report, the name of the hospital was not exhibited and other details like post mortem number, date *etc.*, was shown incorrect.

2.5.10 Development of 9 Application Software

The Government of Maharashtra (GoM) decided to computerise police functions other than crime and criminals like housekeeping and maintenance activities, personal information and accounts. The work of development and implementation of software called '9 Application Software' (9AS) was entrusted to M/s. Computer Maintenance Corporation of India (CMC) Limited for Rs 1.69 crore in March 2007 with the stipulation to implement it at Pilot sites in Phase I at nine⁸³ Commissionerates within six months of contract signing and rolling out of application software in the remaining sites within 18 months.

Though an amount of Rs 74.87 lakh was spent and 21 months gone, the application package was yet to be rolled out (June 2009) even at Pilot sites due to non-availability of connectivity at central server Mumbai, disaster recovery site at Pune and all other offices.

2.5.11 Conclusion

The objectives of introduction of CCIS and CIPA were not achieved. The critical data required for investigation purposes and generating reports from CCIS is still largely incomplete. Better co-ordination between the State Government and Ministry of Home Affairs, Government of India would have resulted in avoiding duplication of purchase of hardware. The deficiencies in input controls and supervisory checks have resulted in incomplete and incorrect database, making it unreliable and thus not useful. Due to non-working of 'Bridge Software', the CIPA data was lying on stand alone servers of the respective PSs without being ported to CCIS and hence not available on the national web server since October 2007. The 9 Application package envisaged to computerise other office functions was not rolled out even at

⁸³ Amravati, Aurangabad, Mumbai Railway, Nagpur, Nashik, Navi Mumbai, Pune, Solapur and Thane

Pilot sites after incurring an expenditure of Rs 74.87 lakh so far. No tangible benefits have thus accrued so far from the computerisation.

2.5.12 Recommendations

In order to make computerisation effective in Police Department, following recommendations are made:

- ▶ Capturing of data in CCIS and CIPA system should be speeded up for ensuring complete information.
- ▶ The correctness of data has to be ensured through suitable input controls and supervisory checks.
- ▶ Bridge Software should be made operational to enable porting the CIPA data to CCIS and vice versa for making information available for investigation.
- ▶ The input controls and validation checks should be strengthened to make data complete, accurate and reliable.
- ▶ The users at various levels needed to be trained to ensure the utility of the database.
- ▶ Department should initiate a time-bound action to implement the 9 Application Software.