DoIT.C
Department of Information Technology & Communication, Rajasthan

GOVERNMENT OF RAJASTHAN
Department of Information Technology & Communication

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Minutes of 103rd meeting of SeMT dated 24-01-2025

The 103rd meeting of the State e-Governance Mission Team (SeMT) was convened under the Chairpersonship of Secretary & Commissioner, IT&C on 24th January, 2025 in Committee Room, 2nd Floor, IT Building, Yojana Bhawan Campus, C-Scheme, Jaipur. List of participants is enclosed at **Annexure -"A"**.

Agenda Item(s) discussed during 103rd meeting of SeMT are indexed as follows:

(Rs. in Lakh)

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1	Operation & Maintenance Of "Labour Department Management System (LDMS)" For Six Months	Labour Department	784.55	2
2	PMU extension for 5 months (01-11-2024 to 31-03-2025) for online computerization project of SIPF Portal 3.0	SI&PF Department	80.57	4
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	K. Laptop, Printer with connectivity for 1283 Police Outposts		2566.00	17
	L. Facial Recognition Technology integration in various IT applications of Rajasthan Police		204.00	18
	M. Establishment of AI/ML Lab		500.00	19
4	Establishment of State Remote Sensing Application Centre (SRSAC) Sub Centre at Jaipur	Dept. of Science & Technology	384.05	21
5	Upgradation of SAP ERP System and adoption of revised hardware proposal for SAP-RISE at BSDC, Jaipur	RRVPNL, Jaipur	6971.00	39
6	RERA Version 1.0 Project revised cost from 421.45 lakh approval in 79th SEMT.	RERA	500.00	41

The followings were discussed in the meeting:

1. Project : Operation & Maintenance of "Labour Department Management System (LDMS)" For Six Months (Labour Dept.)

The Department of Labour, Government of Rajasthan, as a part of their envisioned strategy to strengthen their various administrative functions, have introduced e- Governance at their department. The web application developed during the process "Labour Department Management System" (i.e. LDMS) is one of the most used e-Governance project of the State government.

The project was implemented by M/S CompuCom Software Limited in Dec, 2019. Approval for which was granted in **77th SeMT meeting dated 09-04-2019 at 714.55 Lakh Rs for 5 Years**. This tender for the project ended on 15-12-2024.

The project was implemented by M/S CompuCom Software Limited in Dec, 2019. Labour Department's new software will now be developed and maintained by NIC. Approval for which has been granted in 101st SeMT. In Project Proposal submitted by NIC, it was stated that they will collaborate with CompuCom Software Limited for a period of six months.

To ensure uninterrupted availability of the departmental services to the citizen and in view of the upcoming requirements, Labour Department intends to continue the ongoing services for six months of M/S CompuCom Software Limited for Labour Department i.e. "O&M of LDMS application".

To ensure the uninterrupted availability of citizen services of Labour Department, a Project Proposal has been prepared to provide these services for 6 months. The Project Proposal serves as a roadmap for continuation of Operations & Maintenance services being provided by M/S Compucom Software Limited to Labour Department.

Project Objectives:

Objective of this project, as envisaged by the Department of Labour (DoL), Government of Rajasthan (GoR), is to provide information and facilitate improved stakeholder interactions so as to ensure the achievement of vision and objectives of vision and objectives of the DoL. Towards the same, the following have been envisaged to be achieved:

- Provide all the required information on laws/ rules and activities of DoL.
- Enable all citizen centric services (G2C), business centric services (G2B) and
- Government centric services (G2G) through a web portal.
- Facilitate online submission of application forms for registration under various labour Laws/ Acts.
- Facilitate online submission of claims and complaints under quasi-judicial and industrial disputes activities carried out by DoL.
- Online status tracking of application form through Department and/ or citizen service centres.
- Computerization of registration and inspection related activities.

- Enable establishment for online registrations, inspection reports, annual/ semi-annual
- returns filling.
- Creation of an ICT enabled Management Information System.
- Cess collection/ assessment
- BoCW Module:
    - Labour Registration and Card Issuance
    - Labour Card Renewal
    - iii. Apply for Scheme – 13 Welfare Schemes
    - iv. Welfare Cess Deposit – Construction Company/ Citizen

Core Features:

Presently following application portals are running for different activities of the department:

- Registration Module
- Inspection Module
- BoCW Cess Module
- Quasi-Judicial and Industrial Disputes Module
- Prosecution Sanction Module
- Recovery Module
- Standing Order Module
- Returns Module
- Scheme Module
- BoCW Module

The implemented solution has following highlights:

- The application was the first one to be integrated with SSO.
- The application is integrated with SWCS (Single Window Clearance System), CIS (Central Inspection System).
- All services are live on the eMitra kiosks, citizen can apply directly.
- The disposal of all the applications is based on FIFO, also the allocation is random.
- The approval work flow is flexible.
- The system is capable to suite requirement of urban and rural both populations (for BoCW).
- Establishment registration is being used only in urban area.
- The system is complained with all EoDB points.
- Messages: Facility to send instant internal messages to one or more department user(s) with the help of the application; like to call a meeting or inform about a training program. Notifications to citizen through SMS.
- Search an Application: Facility to search and to identify the status of an application related to any of the modules.

Project Period:

The project shall be implemented as per following timelines:

O&M of the entire LDMS system – **6 months proposed from 16-12-2024 to 15-06-2025.**

LDMS Manpower Cost Estimate for 6 months								
S.N.	Position	Qty.	Rate	Monthly	Quarterly	Half Yearly	Add 15% Increment	TOTAL (Add GST @ 18%)
1	PM	1	1,60,000	1,60,000	4,80,000	9,60,000	11,04,000	13,02,720
2	DBA	1	1,33,000	1,33,000	3,99,000	7,98,000	9,17,700	10,82,886
3	Sr Developer	1	1,26,000	1,26,000	3,78,000	7,56,000	8,69,400	10,25,892
4	Developer	3	65,000	1,95,000	5,85,000	11,70,000	13,45,500	15,87,690
5	System Engineer	1	70,000	70,000	2,10,000	4,20,000	4,83,000	5,69,940
6	Help Desk Exec.	3	21,000	63,000	1,89,000	3,78,000	4,34,700	5,12,946
7	Division Support	7	18,000	1,26,000	3,78,000	7,56,000	8,69,400	10,25,892
		17	5,93,000	8,73,000	26,19,000	**52,38,000**	**60,23,700**	**71,07,966**
NOTE - Grand Total (Estimated amount in INR Lakh (Excluding Taxes) : 60.237								

Financial Implication:

The cost for the Operations & Maintenance of LDMS solution for extended 6 months (16-12-2024 to 15-06-2025) is estimated at about INR 70,00,000/- (Rupees Seventy Lakh Only) and the Total cost amounting to be 784.55 Lakh (714.55 Lakh + 70.00 Lakh)

Fund Management:

Expenditure would be met from the funds available with Labour Department, Rajasthan.

The Committee accords revised technical approval from 01-02-2025 to 15-06-2025 (including post-facto technical approval for the period of 16-12-2024 to 31-01-2025) on the project proposal having estimated cost of Rs. 784.55 Lakh.

2. Project : PMU extension for 5 months (01-11-2024 to 31-03-2025) for online computerization project of SIPF Portal 3.0 (SIPF)

Earlier in the meeting of 88th meeting of SeMT dated 12-11-2021, approval was received for maintenance of SIPF portal through RISL till 31-10-2024. Regarding departmental online computerization project, the referenced approval has been received for the services of 9 resources under the proposed PPR PMU from 01-11-2024 to 31-03-2025 (total 05 months) through RISL-DOIT for maintenance of departmental web application SIPF portal and departmental website, software development, de-bugging, mobile app, work related to online modules related to departmental schemes and other future requirements.

In place of the said short term period of 5 months, as per the reference letter of RISL dated 06-12-2024 (in which it is mentioned that the work period of the present contracted firm has been extended till 05-03-2025), it is proposed to get the extension to the earlier RISL-PMU till 31-03-2025 (05 months) on the basis of the following calculation of the current terms and rates (amount for 05 months Rs. 80,57,177/- in words rupees eighty lakh fifty-seven thousand one hundred seventy-seven only)-

The financial calculation is proposed as follows on the increment of 05 months on the current terms and rates-

(Amount in Rs.)

S.N.	Resource	No. of Resource	No. of Month	Man Month Rate	Total Cost
1	Sr. Project Manager	1	5	1,78,580.00	8,92,900.00
2	Sr. Database Expert	2	5	1,50,000.00	15,00,000.00
3	Sr. Developer	5	5	1,22,406.80	30,60,170.00
4	**Sub Total (1+2+3)**				**54,53,070.00**
5	Consulting Service Charges @10%				5,45,307.00
6	Contingency Charges @2%				1,09,061.00
7	**Total (4+5+6)**				**61,07,438.00**
8	GST @18% on Total				10,99,339.00
9	**Project Cost (7+8)**				**72,06,777.00**
10	RISL Service Charges @10%				7,20,678.00
11	GST on RISL Service Charges @18%				1,29,722.00
12	**Total Project Cost (9+10+11)**				**80,57,177.00**

Fund Management:
Expenditure would be met from the funds available with SIPF Department.

The Committee accords technical approval from 01-02-2025 to 31-03-2025 (including post-facto technical approval for the period of 01-11-2024 to 31-01-2025) on the project proposal having estimated cost of Rs. 80.57 Lakh.

3. Project : A comprehensive five (5)-year plan covering all IT projects (SCRB)

The State Crime Records Bureau (SCRB), Rajasthan, plays a pivotal role in modernizing and streamlining law enforcement through the adoption of technology. This proposal outlines a comprehensive five-year plan covering all IT projects, with a focus on achieving integrated, efficient, and technology-driven policing. Projects include the centrally funded Interoperable Criminal Justice System (ICJS 2.0), as well as several state-funded initiatives aimed at addressing infrastructure gaps, enhancing investigative processes, and building capacity among personnel.

Objectives

1. Establish robust IT infrastructure across police stations, higher offices, and outposts.
2. Enhance interconnectivity and data sharing among the five pillars of the criminal justice system: Police, Prosecution, Forensics, Prisons, and Courts.
3. Modernize investigative processes through advanced technologies such as AI/ML and facial recognition.
4. Build capacity among law enforcement personnel and technical teams to ensure smooth implementation and operation of IT systems.
5. Upgrade and maintain existing IT infrastructure to ensure long-term sustainability.
6. Develop centralized data storage solutions to enhance accessibility and efficiency.

The proposal is divided into centrally funded ICJS 2.0 initiatives and state-funded projects, ensuring a holistic approach to IT modernization within Rajasthan Police.

A. ICJS Hardware for Police Stations in Rajasthan

The Integrated Criminal Justice System (ICJS) aims to connect different pillars of the criminal justice system—Police, Courts, Prisons, Prosecution, and Forensics—through technology, ensuring seamless communication and data sharing. This proposal outlines requirements for the ICJS project, highlighting the division of responsibilities between the Central and State Governments.

Inter-operable Criminal Justice System was approved by the Cabinet Committee on Economic Affairs (CCEA) in November 2015. ICJS was developed by the Ministry of Home Affairs (MHA) with the National Informatics Centre (NIC) as the implementing partner, to build interoperability among justice delivery departments—Police, Prisons, Prosecution, Forensics, and Courts. Interlinked data flow in ICJS is based on the "Data Sharing Matrix" approved by the e-Committee of the Supreme Court of India. Development and implementation of e-Forensics and e-Prosecutions were also initiated under ICJS.

The Crime & Criminals Tracking Network and Systems (CCTNS) aims to modernize police forces, and now CCTNS (police pillar) is a part of ICJS. It prioritizes citizen services, information gathering, and information dissemination among various police organizations across the country. CCTNS is a Mission Mode Project of MHA, Government of India, conceptualized under the National e-Governance Plan (NeGP).

A total fund of INR 12,288.04 lakh from the Central and State Governments was utilized from FY 2017-18 to FY 23-24.

In January 2022, the Cabinet approved reform areas for the ICJS Project at a cost of INR. 3,375 Crore for FY 2022-23 to FY 2025-26 nationwide. In year 2024-25 Rajasthan received INR. 93,93,73,784/- under the ICJS 2.0 State Action Plan.

ICJS Project Objectives:

- To establish robust IT infrastructure in police stations, higher offices, and outposts.

- To integrate ICJS pillars (Courts, Prisons, Prosecution, and Forensics) through effective technology.
- To build capacity for police personnel and technical staff for smooth IT application operations.
- To introduce and implement emerging technologies, like Artificial Intelligence (AI) and Machine Learning (ML), for enhanced policing.

Funds approved by Central Govt.:-

The Central Government has provided funding and support for the following components to achieve these objectives:

1) Hardware Provision for Existing Police Stations

To exploit modern technology solutions in ICJS and comply with the digitization of data rules of measurement collection & centralized storage notified under the Criminal Procedure Identification Act, 2022, the ICJS project will fund update/refresh of IT hardware items.

- **Computers**: Desktops for all existing police stations.
- **Multifunction Printers (MFPs)**: For scanning, printing, and photocopying.
- **QR Code Scanners and Printers**: For seamless inventory and evidence tracking.
- **Mobile Data Terminals (MDTs)**: For field officers to access ICJS systems remotely.
- **Fingerprint Enrolment and Scanning Devices**: For biometric data collection.
- **Web cam**: **For Video conferencing**
- **Budget:** 4642.35 Lakh

2) Capacity Building: (For all Pillars - to be spent by Police Department)

- **Training for Master Trainers**: The Central Govt will support capacity building for Master Trainers at District Training Centres (DTCs), who will train other personnel.
- **Minimal Hardware for DTCs**: Including training workstations, LED, and essential equipment.
- **Budget:** 145.88 Lakh

3) Information, Education, and Communication (IEC): (For all Pillars - to be spent by Police Department)

- **IEC Budget**: Allocated to create awareness materials (videos, leaflets, posters) to promote ICJS among law enforcement personnel and the general public.
- **Budget:** 160 lakh (for year 2024-25 & 2025-26)

4) Network Connectivity (For all Pillars)

- **Budget for Network Connectivity**: To provide reliable broadband connections for police stations, enabling ICJS database access and inter-departmental communication. Connectivity will be provided by DoIT&C.
- **Budget:** Rs. 3030.00 Lakh (For total 1515 sites of all pillars)
  For Police Pillar Rs. 2046 Lakh for 1023 Police stations

Funds Approved by NCRB:

SN	Item	Year	Budget Status	Budget Sanctioned	Remarks
1	Hardware for Police Station	2024-25	Sanctioned by Govt. of India	4642.35 Lakh	For purchasing Computers, Printers, MDTs, FED, QR code reader, QR code printer, Single digit scanner & web cam for 1023 Police stations
2	Capacity Building	2024-25		145.88 Lakh	One Desktop, One LED and One VC equipment for 42 District Training Centres & INR.35,588 per trainer for training expenses for 168 Master trainers
3	IEC	2024-25 2025-26		80.00 Lakh 80.00 Lakh	Share of cost of media campaigns for awareness through Digital media plan, TV, Radio, Cinema & outdoor Campaign effectiveness/impact assessment survey
	Total			**4948.24 Lakh**	

Note: Vide Home Dept. Letter dated 30-10-2024 Administrative & Financial Sanction of Rs. 4948.24 Lakh has been received.

Approved Funds for Network Connectivity:

SN	Item	Year	Budget Sanctioned	Remarks	Budget Status
1	Network connectivity at Police stations (1023 Police Stations)	2024-25	INR. 2046.00 Lakh	INR. 02.00 Lakh per site (1023 Police stations in Rajasthan)	A&F from Home Dept. is awaited

View of the Committee:

Total fund provided by GoI under ICJS for network connectivity is Rs. 3030.00 Lakh for a total No. of 1515 sites of all four pillars of ICJS including 1023 Police Stations of the Police Department. Additionally, connectivity at 20 new Police Stations is also required. It was noted that funds have been made available as per site/ uniform basis whereas actual expenditure is likely to be more. Considering the importance of having appropriate network at these locations, the Committee decided that any additional funds required for this purpose will be borne by DoIT&C under RajNet project.

The Committee accords technical approval on the project proposal having estimated cost of Rs. 7978.24 Lakh. Regarding IEC, technical approval by SeMT is not required.

B. Site Preparation for Police Stations

As per NCRB guidelines Site Preparation, Operation & Maintenance (O&M of all hardware items during & after the project is the responsibility of the State/UT). The State Government will handle site preparation at 1043 police stations, including:

- **Electrical Wiring and Earthing**: For new hardware installation.
- **Furniture and Fixtures**: For proper placement of devices.
- **Network Cabling**: To ensure seamless connectivity.
- **Air Conditioners**: To maintain optimal conditions (Environment Control) in IT rooms.

S No.	Item	Unit Rate	Quantity	Total cost in Rs.
1	Table	12000	1043*4=4172	500.64 Lakh
2	Chair	8000	1043*4=4172	333.76 Lakh
3	AC	70000	1043	886.55 Lakh
4	Networking, Electrical wiring, LAN cabling, Earthing etc.	85000	1043	730.10 Lakh
Total Budget required				**2451.05 Lakh**

- *As per NCRB guidelines, Site preparation is the responsibility of the State.*
- *Earlier 04 Computers, 02 printers, MDTs and other devices were provided at each police station and site preparation work was done in 2017-18.*
- *Earlier sites have undergone significant wear and tear over time, rendering them inadequate for current operational requirements.*
- *Up gradation of these networking sites and preparation of new ones for the additional hardware to be provided under the ICJS project has become essential.*
- *A survey was conducted by M/S Gaurang Infratech International LLP, Durgapura, Jaipur for estimation of site preparation in various police stations of Jaipur.*
- *Proposal for site preparation sent to Home Dept. Letter No. 2801 dated 11.11.2024 of Rs. 24.5105 Crore*

The Committee accords technical approval on the project proposal having estimated cost of Rs. 730.10 Lakh regarding the work of Networking etc. Rest items are beyond scope of SeMT.

C. Hiring of Technical Experts

The Technical Core Group (TCG) within the Rajasthan Police, established under the State Crime Records Bureau (SCRB), is responsible for driving IT advancements across police operations. A technical team for the Police Department comprising of personnel from both Police & DoIT&C as well as private technical experts. Team of private technical experts have

been hired from C-DAC to ensure seamless ICJS operation and future technology integration, focusing on predictive policing and big data analysis. The State Government sanctioned the hiring of 20 experts in FY 22-23. To continue, Rajasthan Police required A&F of 1139.88 Lakh for hiring of 20 technical experts for FY 24-25. The Rajasthan Police received A&F sanction for hiring services of 20 technical experts for FY 24-25 subject to approval by SeMT.

From FY 2025-26 onwards for next 5 years, we will be requiring services from C-DAC which are detailed below:

a. C-DAC, will act as the Technology Partner of Rajasthan Police by sharing technical insights, leading practices, and expert advice.
b. C-DAC will provide insights into technological advances that will assist the SCRB Rajasthan, through the TCG, to induct new products/technologies into the service.
c. C-DAC will deploy Technical Experts at Police Headquarters Rajasthan, Jaipur along with offsite back-end support of C-DAC team at Chennai towards furtherance of goals of managing software as well as development of new products.
d. C-DAC technical experts will work for the enhancement of CCTNS, Police Portal, Rajasthan Police Mobile Applications, and Analytics Dashboard as well as for the integration of CCTNS with other third-party applications like ICJS, Prosecution, FSL, Jail, Court, Social Justice, and Transport through consuming APIs provided by the respective application owners. C-DAC knows that the requirements in government environment are dynamic and TCG will support whatever IT requirements come-up, if a separate proposal is required, it will be provided.
e. C-DAC will enable the demonstration of various in-house products/ software applications developed by various centres of C-DAC to SCRB Rajasthan and their implementation on mutually agreed terms and conditions. If required, C-DAC will sign separate MoUs/Agreements for implementation of product/ software applications owned by C-DAC.
f. C-DAC will provide technical expertise to SCRB in evaluating, estimating cost and developing procurement criteria for new products and technology. This will be done in various methods, including conducting demonstrations/trials, hackathons, having a multi-faceted board (possibly academia, CDAC, industry reps, Rajasthan Police rep etc) that will periodically convene to carry out such tasks. The TCG will assist in RFP preparation and procurement activities as per the direction of competent authorities of Rajasthan Police.
g. C-DAC will recommend suitable composition and size of C-DAC component of TCG and will review its effectiveness on regular basis. The composition and size of the C-DAC team can vary on a need basis as per the requirement of Rajasthan Police and mutual agreement between SCRB, Rajasthan Police and C-DAC. C-DAC will also recommend the skill sets and numbers of other two components of TCG namely – DoIT&C and Police Personnel.
h. C-DAC will assist SCRB, Rajasthan in establishing SDLC processes for smooth functioning of TCG and effective & transparent mechanism to review the work of TCG members.

i. C-DAC will review the existing application architecture, database and infrastructure management processes and suggest / redesign the application, database and infrastructure architecture and its implementation roadmap for running existing/ futuristic applications seamlessly.
j. C-DAC technical experts will supervise/ handhold technical team members of TCG (personnel from Rajasthan Police and DoIT&C) in executing the technical tasks assigned to them.C-DAC will support SCRB Rajasthan in capacity building of TCG team members and will provide regular on-the-Job training conducted by C-DAC or specialist hired as technical experts. Manpower at the site can be increased, decreased or changed in accordance with the agreed schedule of prices.
k. To take up new modules which are not directly linked with CCTNS but affect other aspects of Policing. The modules will cover management of Human resources, Law and Order, Police Line Management, Products for tackling Cyber Crime, Internal Police Communication etc.
l. The scope will be enhanced to cover more citizen services including Citizen On boarding using Janadhar/Aadhar, servant/tenant verification, character verification etc. on new technical platform.
m. CCTNS 2.0 customization as and when it comes.
n. Technology induction, engagement of technical expert of niche technology, expert trainers & professional agency, deployment of Technology, Tools, Solutions etc.

CDAC as an organization, plays a significant role in the development and implementation of CCTNS 2.0 (Crime and Criminal Tracking Network and Systems), a modernized version of the earlier CCTNS initiative aimed at improving policing efficiency and public service delivery. Rajasthan Police is one of the leading state in implementation of CCTNS CAS software. Hence Rajasthan Police has requested NCRB to consider Rajasthan Police in the pilot project implementation of CCTNS 2.0 which will enhance the operational efficiency of Rajasthan Police and pave the way for a successful statewide implementation.

Therefore, the fund required for FY 25-26 is Rs. 1980.00 Lakh, FY 26-27 Rs. 2178.00 Lakh, FY 27-28 Rs. 2395.80 Lakh & FY 28-29 is Rs. 2635.38 Lakh (Annual increment of 10 percent of total cost of previous year). Technologies being used for various IT applications of Police department are:

Application	Technology
Analytics	SAS , Tableau
CCTNS/CCTNS Reports/CCTNS Web Services	JDK7 , Spring MVC, MySQL 5.7
CCTNS Citizen	JDK6, Spring MVC, MySQL 5.7
Old Police Portal	ASP .NET(.Net Framework) / MSSQL 19
RajCop Official/ RajCop Citizen	Flutter, iOS, Android, Spring Boot, JDK11/JDK17/MySQL 5.7/MySQL 8
New CCTNS Portal	ReactJS 16, Spring Boot, JDK11/JDK17/MySQL 5.7/MySQL 8
New Citizen Portal	Angular 18 , Spring Boot, JDK11/JDK17/MySQL 5.7/ MySQL 8
New Police Portal	Angular 16 , Spring Boot, JDK11/JDK17/ MySQL 8

Budget Projections for Hiring of Technical Experts:

S.N.	Item	Year	Budget Required	A&F Status	Remarks
1	Hiring of Technical Experts	2024-25	11.39 Crore	Received sanction of 20 experts for year 2024-25 & 2025-26, Subject to SeMT approval	Purchase order issued for technical experts along with additional components of Technology induction, engagement of technical expert, expert trainers, deployment of technology, solutions etc. dated 28.06.2024 CDAC in compliance with P.O CDAC started support from 1st July 2024. Post facto sanction of SeMT is required.
2		2025-26	19.80 Crore		
3		2026-27	21.78 Crore	No	
4		2027-28	23.96 Crore	No	
5		2028-29	26.36 Crore	No	
		Total	**103.29 Crore**		

The Committee accords technical approval on the project proposal for the period of 2024-25 to 2028-29 having estimated cost of Rs. 10329.00 Lakh (including post-facto technical approval for the period of 2024-25).

D. Capacity Building for TCG (Police and DOIT&C personnel)

The Technical Core Group (TCG) within the Rajasthan Police, established under the State Crime Records Bureau (SCRB), is responsible for driving IT advancements across police operations. A technical team for the Police Department composed of personnel from both Police & DoIT&C as well as private technical experts. This group manages critical tasks such as server and database management, software development, data security, and integration with the Interoperable Criminal Justice System (ICJS). The TCG plays a central role in implementing projects like CCTNS, providing IT training, and ensuring secure and efficient data management. Through these efforts, the TCG supports the Rajasthan Police in achieving self-reliance and enhancing technical capabilities.

The "Technical Core Group" (TCG) has been established to address the evolving IT needs of Rajasthan Police. During FY 2022-23, the SCRB was allocated INR 103.84 Lakhs for the capacity building of TCG. To continue strengthening the group's capabilities, a fund requirement of INR 231.00 Lakh for FY 2025-26 has been proposed in the BFC (Plan) meeting. As per the directions from the BFC (Plan) meeting, approval from SeMT is to be obtained.

Additionally, for the continued development of specialized technical training for both Police and DOIT&C personnel within TCG, a funding projection for FY 2025-26 to FY 2028-29 with 10 percent annual increment has been submitted. **Selection of members of TCG should be through a screening process where appropriateness and potential technical capability is judged objectively.**

S.No.	Item	Year	Budget Required (In Lakh)		A&F
1	Capacity building for TCG (Police & DoIT&C personnel)	2024-25	210.00	SCRB to Home Dept. Vide e-2782 dated 07.11.2024	No
2		2025-26	231.00	SCRB to Home Dept. vide e-3199 dated 26.12.2024	No
3		2026-27	254.10		No
4		2027-28	279.51		No
5		2028-29	307.46		No
Total of 2,3,4,5			**1072.07**		

The Committee accords technical approval on the project proposal for the period of year 2025-26 to 2028-29 having estimated cost of Rs. 1072.07 Lakh with direction that the facilities at RCAT center may also be used for various emerging technology viz. AI & ML and Cyber Security trainings.

E. Hardware Maintenance

Following the expiration of hardware warranties for equipment purchased in 2017, the State is now responsible for covering the costs of Annual Maintenance Contracts (AMC) for workstations, printers, UPS units, and UPS battery replacements, which include a 2-year warranty. For FY 2024-25, a provision of INR 1830.48 Lakh has been allocated for the maintenance of these items. A payment of INR 1154.00 Lakh has already been made in FY 24-25, and an additional A&F of INR 700.00 Lakh has been received from the Home Department (vide order 86/2024-25, dated 25.10.24) for the release of pending payments, subject to approval from SeMT.

The committee advised that procurement and maintenance of IT equipment may be done in consonance with the IT & ITeS Policy 2015.

The Committee accords post-facto technical approval of AMC of Desktop, printer and UPS with battery replacement for FY 2024-25 of Rs. 1830.48 Lakh (AMC of Desktop with chargeable - Rs. 167.93 Lakh, AMC of Printers with chargeable parts- 530.55 Lakh, AMC of UPS and Replacement of UPS Batteries - Rs. 1132.00 Lakh).

F. Audio/Video Devices for e-Sakshya App

The Ministry of Home Affairs has introduced the e-Sakshya app for the digital recording of crime scenes, seizures, and evidence. Audio and video devices have been provided to selected police stations for testing purposes. Based on the recommendations of the Technical Integration Committee, formed by the DGP of Rajasthan, and feedback from investigators, it is necessary to equip 31,000 investigation officers with these devices to ensure the smooth implementation of new criminal laws in the state.

As per the 2024-25 budget announcements No. 100(VI), a provision of Rs. 50 Crore has been allocated for IT equipment to support the implementation of new criminal laws, effective from July 1, 2024.

For FY 2024-25, an A&F of INR 2638.80 Lakh has been received (vide 103/24-25) for 8,796 devices at INR 30,000 per device. In FY 2025-26 A&F of INR 6661.20 Lakh is required for the remaining 22,204 devices.

S.No.	Item	Year	Budget Required	A&F
1	Audio Video Devices for IOs (For E-Sakshya App) Rugged 6.5" Mobile Devices & Rugged 8" Tablet as per specifications provided by SCRB	2024-25	2638.80 Lakh	Vide Home Dept. Letter
		2025-26	6661.20 Lakh	

The Committee accords technical approval on the project proposal having estimated cost of Rs. 9300.00 Lakh for the procurement of 8796 and 22204 No. of AV devices for year 2024-25 and year 2025-26 respectively.

G. Data Centre and Storage Hardware Requirement (To be done by DoIT&C)

The CCTNS project was started in 2017 and the same is being integrated in ICJS now. The ICJS is an integrated database of all 4 pillars of Criminal Justice System i.e. Police, Prosecution, Courts and Prison. FSL has also been included in ICJS and other departments are also joining in. The core application software under the CCTNS project is being continuously upgraded by adding new features to it to enhance the data of criminals like online case diary, criminal merge, criminal profiling etc. Till date more than 19.47 lakhs FIRs have been registered in the system and 4.78 crore General Diary entries have been made. In addition to it, entries related to Crime Scene, Arrest, Seizure, Malkhana, FR/Challan, Missing Person, Dead Body registration etc. are also being done in CCTNS. The investigation of FIRs and other registration is also being done online.

The regular upgradation and addition of new modules has contributed to a rapid increase in the database of CCTNS and integration with ICJS will further create pressure on the efficiency of application and database. This is resulting in 99% utilization of CPU many times and not availability of application due to which registration of FIR in police stations is becoming difficult at times.

In view of the above, it is required to continuously upgrade the hardware and storages at the Data centre and Disaster recovery centre. Below is the working of hardware requirements with respect to the Police department on DC/DR for next 5 years to be taken care of by DoIT&C. (Refer Annexure X) the storage cost was presumed to be in accordance with new criminal laws. It was also presumed that the storage cost will be borne by the states. The recent development of e-Sakshya App by NIC providing storage also has changed the dynamics currently. Final policy call regarding who will bear the cost of storage will determine the budgetary requirements of the future.

Storage Cost (DC, DR, Backup)	1600.00 Lakh
Hardware cost for POLICE related project - 5 years	906.25 Lakh
Hardware cost for CCTNS project - 5 years	984.13 Lakh
Other resource cost (Data digitization/migration, ACB, Staging and Training environment) - 5 years	742.00 Lakh
Total Cost for 5 years.	**4232.38 Lakh**

The Committee accords technical approval on the project proposal having estimated cost of Rs. 4232.38 Lakh. Fund shall be transferred to DoIT&C which shall be the implementing agency.

H. Computer Hardware for 20 new police station (Not included in ICJS fund approved by NCRB)

Rajasthan has received approval for funds to provide computer hardware for 1,023 police stations under the ICJS project by NCRB. The remaining 20 police stations are to be equipped as per the project guidelines of ICJS by the State Government. For FY 2025-26, an A&F of INR 129.00 Lakh is required for this purpose. As directed in the BFC (Plan) meeting, approval from SeMT is to be obtained.

- Hardware to be provided to these Police stations as per the norms laid down by NCRB
- Cost and specs of Hardware will be same as for hardware being procured for 1023 Police Stations
- Proposal of Rs. 1.29 Crore has been sent to Home Dept. for year 2025-26

Budget projection for Hardware for 20 new Police Station:

(Amount in Rs.)

S. N.	Item	Rate per item	Total no. of Items	Total cost
1	Desktop with UPS (4)	70,000	80	56,00,000
2	Single Digit Scanner (6)	3,000	120	3,60,000
3	MDT (2)	30,000	40	12,00,000
4	MFP (2)	25,000	20	5,00,000
5	Web Cam (4)	3,000	80	2,40,000
6	QR code Reader (1)	2,000	20	40,000
7	QR code printer(1)	8,000	20	1,60,000
8	FED (1)	40,000	20	8,00,000
9	Network connectivity (1)	2,00,000	20	40,00,000
	Hardware Budget For 20 Police Stations			**1,29,00,000**

The Committee accords technical approval on the project proposal having estimated cost of Rs. 129.00 Lakh.

I. Computer Hardware for Technical Core Group

The Technical Core Group (TCG) within Rajasthan Police, established by the Government of Rajasthan under the State Crime Records Bureau (SCRB), comprises 94 posts of Police Telecommunications and 76 posts of the Department of Information Technology & Communication (DOIT&C). These personnel require computer hardware and OS with five year warranty to perform their duties effectively. For FY 2025-26, an estimated fund requirement of INR 80.00 Lakh is necessary for this purpose. As directed in BFC (Plan) meeting approval of SeMT is to be obtained.

- Technical Core Group comprising of Police & DoIT&C personnel
- TCG personnel, who are being trained for various application development and training on cyber security etc.
- These personnel will require Hardware like High End Desktop Computers

S.No	Name of Item	Quantity	Rate	Total
1	Workstations (As per DoITC Generic Technical Specification uploaded on DoITC/ Finance Dept. Website, refer category 4.A) with 5 years warranty	40	2,00,000	80,00,000
			Total	**80,00,000**

The Committee accords technical approval on the project proposal having estimated cost of Rs. 80.00 Lakh.

J. Computer hardware and software for 9 new District Training Centres

Under the CCTNS project, district training centres were established in 42 police districts, where police personnel were trained on the CCTNS application. These training centres are continuously being utilized for training related to IT projects and implementation of new criminal laws. To facilitate the implementation of various ICT projects of Rajasthan Police in the state's 9 newly formed districts (as per new notification), it is proposed to provide computer hardware, printers, Interactive panels, UPS and Site preparation for the establishment of district police training centres in these districts to train police personnel. The A&F required for FY 25-26 INR 177.60 Lakh for the purpose. As directed in BFC (Plan) meeting approval of SeMT is to be obtained.

Budget Projection for Hardware for New DTCs:

(Amount in Rs.)

S.No	Item	No. of Items	Unit Rate (incl tax)	Cost for one site	Total cost for 9 sites
1	Desktop Computer (As per DoIT&C rate card - Category I A)	10	55,000	5,50,000	49,50,000
2	MFP (As per DoIT&C rate card - Category III A)	1	40,000	40,000	3,60,000
3	Switch 24 Port	1	10,000	10,000	90,000
4	Interactive Flat Panel 65" Display (As per DoIT&C rate card - Category 11 - 3)	1	2,20,000	2,20,000	19,80,000
5	AC 2 Ton	1	60,000	60,000	5,40,000
6	UPS 2 KVA Backup 2 Hrs (100AH*6) (As per DoIT&C rate card - Category 10 - 6 with additional 1.5 hrs backup)	1	1,00,000	1,00,000	9,00,000
7	Site Preparation with Furniture	1	1,30,000	1,30,000	11,70,000
8	**Total cost**			**11,10,000**	**99,90,000**

The Committee accords technical approval on the project proposal having estimated cost of Rs. 99.90 Lakh. The non ICT items like AC, furniture etc. are beyond scope of SeMT.

K. Laptop, printer, furniture with connectivity for Police outposts (1283 Police Chowkies)

1283 police outposts of Rajasthan police were not included in the CCTNS project. The computer hardware and network infrastructure were not provided at these outposts. All tasks at the police outposts, such as maintaining Rojnamcha Aam and other records, are being done manually.

Personnel stationed at these outposts are facing difficulties in editing and updating records online on the CCTNS platform due to the unavailability of necessary resources. To enable the computerization of the various police outposts under police stations, the following resources are required:

S.N.	Name of Item	Quantity	Approx. Cost incl. GST
1	Laptop (i5, 13th Gen, Intel Chipset, 32GB RAM, 1 TB SSD with 15.6" Display) with 5-year warranty (As per DoIT&C letter no. 3517 dated 25.07.2023 and A&F letter no.137 dated 08.12.2022 - Item 2)	1	1.19 Lakh
2	Multifunction Printer - Laser (30 ppm) with 5-year warranty (As per DoIT&C Rate card - Category II - C)	1	0.30 Lakh
3	Internet Dongle with 5-year connectivity charges	1	0.35 Lakh
4	Computer Table with Chair	1	0.16 Lakh
	Total cost for 1 outpost		**2.00 Lakh**
	Total cost for 1283 outpost		**2566.00 Lakh**

The Committee accords technical approval on the project proposal having estimated cost of Rs. 2566.00 Lakh. The non ICT items like computer table, chair are beyond scope of SeMT.

L. Facial Recognition Technology integration in various IT applications of Rajasthan Police

The facial recognition technology based on Artificial Intelligence is highly useful for the immediate identification of criminals, identification of unidentified dead bodies/missing persons, and for identity verification by the police. It is required to integrate this improved technology in police applications. Considering the need for its applicability in criminal investigations and preventive actions, a fund requirement of INR 204.00 Lakh is anticipated for the year FY 2025-26. As directed in BFC (Plan) meeting approval of SeMT is to be obtained.

Objectives:

- To develop a robust face recognition system capable of accurately identifying individuals from facial images.
- To integrate the face recognition system into existing law enforcement infrastructure, including CCTV networks, databases, and mobile devices.
- To improve the speed and effectiveness of criminal identification, investigation, and apprehension processes.
- To enhance public safety and security by enabling proactive monitoring and response to potential threats or criminal activities.

Scope:

- Development and customization of the face recognition system to meet the specific needs and requirements of Rajasthan Police.
- Integration of the face recognition system with existing hardware and software infrastructure.
- Testing and validation of the system's performance under various conditions and scenarios.
- Training of law enforcement personnel on the use of the face recognition system and associated procedures.

S. No	Name of Item	Quantity	Rate	Total
1	Servers with at least 4 CPUs, 512 GB RAM at data centre for hosting of APIs and facial database (Host at State Data Centre)	4	18,00,000.00	72,00,000.00
2	Workstations with 32 GB RAM for managing licenses and maintenance of APIs (As per DoIT&C Rate card. Category 4.A)	2	2,00,000.00	4,00,000.00
3	Facial Recognition System	1	1,28,00,000.00	1,28,00,000.00
	Total			**2,04,00,000.00**

The Committee advised to explore the various options in the Facial Recognition Technology. Re-assess the proposal and re-submit accordingly.

M. Establishment of AI/ML Lab

Artificial Intelligence (AI) presents a significant opportunity for the Rajasthan Police. By integrating cutting-edge technology with traditional law enforcement methods, AI has the potential to revolutionize crime prevention, investigation, and community engagement. Its ability to analyze large datasets and optimize operations can enhance data-driven decision-making, ultimately leading to a more efficient and effective police force.

- **In DGP-IGP Conference 2022, it was recommended that AI/ML Lab should be established.**
- **In DGP-IGP Conference 2023, following recommendations w.r.t AI/ML Lab were given.**
  - **AI tools should be developed to mitigate challenges pertaining to language and legal knowledge faced by the visitors at Police Stations**
  - **AI tools should be developed to identify and block malicious content in the cyberspace**
  - **AI based tools should be used to analyses the religious preaching to identify the radical contents for corrective actions.**
  - **A team of young officers should be formed for a data driven approach to further implementation, use and analysis of the unified entry system. Artificial Intelligence should be leverage for this purpose**

Although Rajasthan Police utilizes various software applications, the full potential of AI has yet to be fully realized. To bridge this gap, we propose the establishment of an AI Lab and Development Centre focused on advancing the technological capabilities of the Police Department.

In addition, the initiative aims to provide comprehensive AI training to law enforcement personnel, equipping them with the necessary skills to effectively leverage AI technologies in their day-to-day operations.

The fund requirement to establish AI/ML Lab for FY 25-26 INR 500.00 Lakh. As directed in BFC (Plan) meeting approval of SeMT is to be obtained.

Scope:

- **Establishment of AI R&D Center for Excellence:**
  - Procure necessary infrastructure and hardware to support AI development and implementation.
  - Recruit and appoint a dedicated team of **5** resources including AI researchers, data scientists, software engineers and AI Project Manager.
  - Acquire essential software tools and licenses for AI research and training.
  - Develop and conduct research on AI applications relevant to law enforcement, focusing on areas like:
    - Crime prediction and hotspot identification
    - Facial recognition and suspect identification
    - Evidence analysis and case management
    - Traffic pattern analysis and anomaly detection
    - Cybercrime detection and prevention

- **Foster a Culture of Innovation:**
  - Assemble a dedicated team of **5** resources including AI researchers, data scientists, software engineers and AI Project Manager to explore and develop AI applications for various policing functions.

- **Training of Police Personnel:**
  - Design and deliver comprehensive training programs to equip **15** police personnel with the knowledge and skills required to utilize AI tools effectively in their daily operations.
  - Training will cover:
    - AI fundamentals and its applications in law enforcement
    - Utilizing AI tools for specific tasks like crime prediction and facial recognition
    - Understanding ethical considerations and potential biases in AI systems
    - Integrating AI effectively into existing workflows

S. No	Category	Cost incl GST
1	A. High-Performance AI Server (01) - Host at State Data Centre	1,20,36,000

2	B. High-Performance GPU Enabled Desktops (20) (As per DoIT&C letter no. 3517 dated 25.07.2023 and A&F letter no.137 dated 08.12.2022 - Category A-high end)	60,00,000
3	C. AI Team (04 Experts) (as per CDAC rate contract)	2,50,77,360
4	D. Any Additional (AI Software Licenses)	68,86,640
	Total	**5,00,00,000**

The Committee is of the view that as the State Data Center is coordinating with Government of India for exploring the requirement for such setup and DoIT&C also collaborating with IIT Jodhpur for AI/ML based Lab and therefore, the Committee advised to study these initiatives, look for such collaborations and also explore Start-ups for these kind of works. The Committee advised to re-examine the proposal of establishment of AI/ ML Lab.

4. Project : Establishment of State Remote Sensing Application Centre (SRSAC) Sub Centre at Jaipur (DST)

As per budget Announcement 2024-25: (22.3), a Sub Centre of SRSAC is to be established in Capital city of Rajasthan – Jaipur.

Location:

The SRSAC Sub Centre will be established at SATCOM, IGPRS, JLN Marg, Jaipur, utilizing existing infrastructure such as electricity, internet, and furnishings—with desired upgrades required.

With reference to the UO Note No. F10(2)FD-1(1)B/2023 from Chief Secretary Sir, the Centre is proposed to be established in SATCOM office, IGPRS, JLN Marg, Jaipur therefore, separate land is not required. As there will be financial implications involved to meet out the requirements of the Budget Announcement, the activity comes under the Category 'C'.

Proposal Overview:

This state-of-the-art facility will focus on Remote Sensing applications for various state departments, capable of interpreting diverse satellite data. It will serve multiple sectors, including Agriculture, Water Resources, Mines & Geology, Forests, Environment, Watershed Management, Settlement, the Board of Revenue, and Town Planning etc.

Objectives of the Jaipur Sub Centre:

1. **Technical Development:** Enhance the technical capacity for GIS and Remote Sensing projects.
2. **Proximity for Meetings:** Facilitate participation in meetings on short notice.
3. **Improved Communication:** Strengthen engagement with state departments based in Jaipur.

4. **Urgent Requirement Fulfillment:** Provide timely support for departmental needs.
5. **Quality Assurance:** Conduct quality checks on ongoing departmental projects. As headquarters of all the user departments are in Jaipur, visit of thematic experts for quality checking in Jaipur will be easier.
6. **Field Surveys:** Enable Ground Truthing (GT) and field surveys in and around Jaipur.
7. **YES-Tech (Technical Yield Assessment) and Acreage Assessment of Crops:** Oversee the Technical Yield Estimation project and acreage assessment for various crops in collaboration with Agriculture Department.
8. **Forest Encroachment Demarcation:** Manage projects related to forest encroachment as mandated by the High Court from Jaipur.
9. **Boundary Updates:** Update administrative boundaries for districts, tehsils, and blocks.
10. **Drone Survey Capability:** Equip the Centre to conduct drone surveys for various state departments, enabling the interpretation of drone data to extract necessary information. Future plans may include procuring drones and developing in-house capabilities.

    Sub Centre - SRSAC may be declared as Nodal for any drone survey requirements in the state.
11. **Requirement of the daily revisit Data in Subscription Mode:**

    Traditional Earth imaging covers only a fraction of the Earth's surface and is only accessible by a small fraction of people. But the current requirement is to image the entire Earth every day, and make global change visible, accessible, and actionable, collecting daily, high resolution imagery, everywhere on the required Area of Interest. Daily imaging means capturing the most recent change across the planet, so that the right decision can be made at the right time, without downloading gigabytes of data. Online dataset live in online mode and accessible via web-based tools and API is required in the form – just open up the web browser to get started.

    SRSAC may be deputed as nodal agency for Daily revisit satellite data in subscription mode so as to cater services to various line department.

Proposed Methods for Sub-Centre Operations:

- **Leadership and Management**: The Technical Director / Project Director (PD) of SRSAC will oversee the Sub-centre. The Drawing and Disbursing Officer (DDO), SRSAC will manage procurements, expenses, and salaries.
- **Location Utilization**: The Sub-centre will be set up at SATCOM, IGPRS, leveraging existing facilities with necessary upgrades. The SATCOM studio and office rooms and IT lab at 2nd floor in the same building can be renovated and used for Sub Centre.
- **Interim Staffing**: Staff from SRSAC Jodhpur will initially manage the Sub-centre operations. Requirement of new posts are being submitted to the Finance Department
- **Resource Allocation**: Proposal for various requirements being submitted to the Finance Department.

This initiative aims to bolster operational efficiency and support state-level projects effectively.

Detailed requirement of Hardware, Software and Manpower submitted by DST is as follows:

(Rs.in Lakh)

S. N.	Item	2024-25			2025-26		
		Qty	Rate (Approx.)	Amount	Qty	Rate (Approx.)	Amount
Hardware							
1	**Workstation 32GB**: Xeon processor or Higher / 32 GB RAM / 4 GB Graphic Card / 1 TB SSD or higher/ 2TB HDD or higher / OS – Windows 11 / Display 27 Inch or higher	8	2.50	20.00	8	2.50	20.00
2	**Workstation 64GB**: Xeon processor or Higher / 64 GB RAM / 4 GB Graphic Card / 1 TB SSD or higher/ 4TB HDD or higher/ OS – Windows 11	2	3.00	6.00	2	3.00	6.00
3	**Laptop**: Intel Core i7/AMD, Ryzen 7, (10th Generation/equivalent AMD), 15" or higher diagonal Full HD Display, 16 GB DDR4 or higher, expandable up to 32 GB / 2 TB SSD or higher	2	1.50	3.0	-	-	-
4	UPS 10 KVA Online	1	3.60	3.60	1	3.60	3.60
5	Plotter cum Scanner (A0 Size or better)	1	9.00	9.00	1	9.00	9.00
6	MFP (A3 Size Color Laser ADF)	1	2.80	2.80	1	2.80	2.80
7	Printer (A4 Monochrome, ADF)	3	0.35	1.05	-	-	-
8	Scanner (A4 size, ADF)	**2**	0.35	0.70	-	-	-
9	Interactive Flat Panel Display with OPS	**1**	1.75	1.75	1	1.75	1.75
10	Local storage : NAS 20 TB / External HDD / External SSD			2.00			6.00
Total			**25.05**	**49.90**			**49.15**
Software							
11	ERDAS Imagine with extensions	1	20.0	20.0	-	-	-
12	LPS with desired hardware Photogrammetric Suite (Hw+Sw)	1	30.0	30.0	-	-	-
13	Apollo Server 8 Core License	1	-	-	1		70.00
Total			**50.00**	**50.00**			**70.00**
Technical and Office Manpower							
14	**Tier-1** Technical Consultants (As per requirement)	2	3.00	18.00	2	3.00	72.00
15	Hired Technical and office Manpower to be hired through RISL/NICSI/Tender	As per requirement	As per requirement	15.00 Max	As per req	As per requirement	60.00 Max

	MTS/OAS/Project Manager/Tech. Lead / Sr. Image Processing Expert/ GIS Operator or equivalent, as per requirement				uire me nt		
Total				**33.00**			**132.0**
Grand Total				**132.90**			**251.15**

**** The amount sanctioned for the post of Technical Consultant is estimated Rs. 3.00 Lakh per month however this may be lowered as per the requirement and nature of work.**

* Originally 232.00 lacs were approved in 2024-25. Additional budget will be demanded separately.

* This NAS/External HDD/External SSD is intended for the development, configuration, and local processing of satellite imagery. Additionally, a separate request for approval of storage space at the Data Centre will be submitted. Completed/Processed data will be stored at the DoIT&C Data Centre.

Technical Specifications for Hardware, Software for SRSAC Sub Centre at Jaipur are as follows:

1. Workstation (32GB) (Professional Workstation):

Parameter	Technical Specifications as per Requirement
Processor	Xeon or Higher
Chipset	Compatible Chipset
Memory (RAM)	32 GB (32X1) or higher, DDR5, 4800 MHz (Upgradeable up to minimum 64 GB)
Storage (HDD & SSD	1 TB SSD 4 PCIe NVMe M.2 or higher and 2 TB HDD
Graphic Card	4 GB or higher
I/O Ports	a) Universal audio jack
	b) min. 2 USB 3.2 Gen 1 Type-A (1x power enabled)
	c) min. 2 HDMI 2.0 or higher
	d) min. 1 Thunderbolt 4 USB-C port with power-in
	e) Smart Card (Optional)
OS Certification	Windows/ RHEL Certified (as per requirement)
Networking	a) Min. 2 Integrated 10/100/1000 GB Ethernet
	b) Bluetooth 5.2 or above & integrated Wi-Fi 802.11 b/g/n or Wi-Fi 6 (802.11ax) or higher
OS	Windows 11/ RHEL (Windows 11 Pro License included) (English) or higher
Keyboard & Mouse	Standard USB Keyboard & USB two-button optical Mouse with Mouse Pad (Same make as Workstation)
Display	Minimum 23.8 inch or higher, Resolution 1920x1080 or higher Display
Warranty	3 Years Onsite Comprehensive Warranty

2. Workstation (Server Workstation):

Parameter	Technical Specifications as per Requirement
Processor	Xeon or Higher
Chipset	Compatible Chipset
Memory	64 GB (32X2) or higher, DDR5, 4800 MHz (Upgradeable up to minimum 64 GB)

Hard Disk Drive/ SSD	1 TB SSD - higher Gen. 4 PCIe NVMe M.2 and 4 TB HDD
Graphic Card	4 GB or higher
I/O Ports	a) Universal audio jack
	b) min. 2 USB 3.2 Gen 1 Type-A (1x power enabled)
	c) min. 2 HDMI 2.0 or higher
	d) min. 1 Thunderbolt 4 USB-C port with power-in
	e) Smart Card (Optional)
OS Certification	Windows/ RHEL Certified (as per requirement)
Networking	a) Min. 2 Integrated 10/100/1000 GB Ethernet
	b) Bluetooth 5.2 or above & integrated Wi-Fi 802.11 b/g/n or Wi-Fi 6 (802.11ax) or higher
OS	Windows 11/ RHEL (Windows 11 Pro License included) (English) or higher
Keyboard & Mouse	Standard USB Keyboard & USB two-button optical Mouse with Mouse Pad (Same make as Workstation)
Display	Minimum 27 inch or higher, Resolution 1920x1080 or higher Display
Warranty	3 Years Onsite Comprehensive Warranty

3. Laptop:

Parameter	Technical Specifications as per Requirement
Processor	Intel Core i7/AMD Ryzen 7, (10th Generation/equivalent AMD), Minimum 6 core, minimum 1.10 GHz base frequency or higher, cache 12 MB or higher Certified by OEM
Operating System	1. Pre-installed Genuine Microsoft Windows 11 Professional (64-bit) or higher / Latest Linux version (to be decided by the concerned Dept. *as per requirement*)
	2. Recovery partition (applicable for Windows)
Display	15" or higher diagonal Full HD Display
Memory (RAM)	16 GB DDR4 or higher, expandable up to 32 GB
Hard Drive	2 TB SSD or higher
Speaker & Microphone	Inbuilt speakers and integrated digital microphone
Connection Type	Minimum 2 USB 3.0 or higher, HDMI 2.0, Headphone/Microphone combo/separate, 1 USB Type-C
Network Card	Integrated 10/100/1000 GB Ethernet
Wireless Connectivity	Bluetooth 4.0 or above & integrated Wi-Fi 802.11 b/g/n or higher
Web Cam	Integrated HD Web Camera (Front-facing)
Battery	Minimum 40 hr
Power Adapter	Standard power adapter
Antivirus	Latest Antivirus & Internet Security, with minimum 3 years subscription
Certification	BIS
Compliance	RoHS
Accessories	Carry Bag
Warranty	3 Years comprehensive on-site OEM warranty

4. UPS: 10 KVA Online UPS :

Parameter	Technical specifications
UPS Capacity	10 KVA

Mode	Online
DC Voltage	Default 192V+, (192 – 240 Settable)
Type	Single phase, IGBT-based, true Online UPS
Input	Single phase-three wires, the bidder has to supply equipment as per power supply available
Output	Single phase-three wires
Output Waveform	Sinusoidal
Power Factor	≥ 0.9
Voltage Regulation	≤ ±2%
Inverter Efficiency	≥ 93%
Overload Capability	110% for ≥ 10 Minutes
Total Harmonic Distortion (THD)	< 5% at Full load
Transient Response	Less than ±10% voltage variation at sudden application/removal of full load and it shall recover within 20 msec.
Environment	Approx.: 0–50°C & 95% RH
Charger	Charging mode shall be provided. Battery Charging Voltage & Current shall be adjustable. Line & load Regulation: ≤ ±2%. Output Ripple: ≤ 3%.
Battery	Battery shall be of Sealed Maintenance (SMF) or VRLA type with minimum 1 Hr. Battery Backup at full load, ISO 9001 & 14001 Certified with Rack/Tray
Other Requirements	Both Manual & Static bypass switch should be provided. Built-in display for displaying all requisite UPS & battery parameters for both input & output
Certifications	BIS
Compliance	ROHS (Only UPS)
Test Report	OEM should submit test report for the quoted model issued by State/Central laboratory (not old from last 5 Years).
On site OEM Warranty	3 Years comprehensive on-site OEM warranty

5. Plotter cum Scanner (A0 or better)

Parameter	Technical Specifications as per Requirement
Size	44" (1118mm)
Printer Type	5 Colour
Number of Head	Single Head
Number of Nozzles	15,360 nozzles or Higher
Maximum Print Resolution	2,400 x 1,200 dpi or Higher
Nozzle Pitch	1 200 dpi (2 lines) Or Higher
Line Accuracy	± 0.1 % or less
Minimum Ink Droplet Size	Minimum 5 picolitre per colour

Standard Memory	2 GB or higher
Hard Disk	500 GB (Encrypted) or Higher
Ink Type	Pigment Ink
CAD Drawings	34 second
Poster	37 second
Media Feed Method	Front Load, Front Output
Management Solutions	Media Configuration Tool, Accounting Manager, Device Management Console, Quick Utility Toolbox
Technology	Single Sensor, full width straight-line CIS with dual LED illumination
Size	36" (914mm)
Optical Resolution	1200 DPI
Scan Format	PDF, Multipage PDF, JPEG, TIFF, DWF
Document Handling	Front Load, Rear Output
Operating System	Windows 10 Enterprise LTSC 64 bit
Processor	Intel Pentium G5400T
Hard Disk	256 GB (Solid State Drive)
Memory	8 GB (DDR 4)
Display	39.624 cm (15.6") multi-touch colour display
Software Included	Smart Works MFP V6
On site OEM Warranty	3 Years Onsite Comprehensive Warranty

6. MFP: A3 Size Color Laser (ADF) Printer:

Parameter	Technical Specifications as per requirement
Printing Technology	Laser
Type of Printing	Color
Paper Size	A3
Print Speed per minute	Color: minimum 15 or Better B & W: minimum 30 or better
System hard drive	256 GB SSD (standard)/1TB SSD (optional)
ADF double feed detection	Standard (with dual scan ADF)
Duplexing Feature	Yes
Connectivity	Wireless / Ethernet/ USB
No. of Main Paper Trays	2
Bypass Tray Facility	Yes
Certification	RoHS Compliance/ BIS/ ISO for OEM
On site OEM warranty (Yrs.)	3 Comprehensive
Print Resolution	1,800 (equivalent) x 600 dpi; 1200 x 1200 dpi
Page Description Language	PCL 6 (XL3.0); PCL 5c; PostScript 3 (CPSI 3016); XPS
Operating Systems	Windows 10 (32/64); Windows Server 2012, 2016, 2019, 2022; macOS 10.14 or later; Linux; Citrix
Printer Fonts	80 PCL Latin; 137 PostScript 3 Emulation Latin
Mobile Printing	AirPrint (iOS); Mopria (Android); Konica Minolta Mobile Print (iOS/Android); WiFi Direct

Scanner Specifications	
Scan Speed	Up to 100/100 ipm (simplex); Up to 200/200 ipm (duplex, mono/color)
Scan Resolution	Up to 600 x 600 dpi
Scan Modes	Scan-to-Email, Scan-to-Me, Scan-to-SMB, Scan-to-Home, Scan-to-FTP, Scan-to-Box, Scan-to-USB, etc.
File Formats	JPEG; TIFF; PDF; Compact PDF; Encrypted PDF; XPS; Compact XPS; PPTX; PDF/A 1a and 1b
On site OEM Warranty	3 Years Onsite Comprehensive Warranty

7. Printer (A4 Monochrome, ADF)

Parameter	Technical Specifications as per Requirement
Printing Technology	Laser
Printing Function	Print
Type of Printing	Monochrome
Duplex	Auto
Paper Size	A4, Legal
Print Speed (A4) Mono	20 PPM or higher
Print Speed (A4) Color	20 PPM or higher
Print Resolution	600x600 Dpi or higher
Memory	256 MB or higher
Network Connectivity	USB, Ethernet, Wi-Fi
Cartridges	Black & Color Cartridges per install
Paper Tray Capacity (A4)	150 pages or higher
Duty Cycle (Monthly)	8000 pages or higher
Software Media	Driver & Utility Software
Compatible Operating System	Windows, Linux, Mac OS
Accessories	All necessary cables (Power & Communication)
Certification	BIS
Compliance	ROHS
Warranty	3 Years comprehensive on-site OEM warranty

8. Scanner (A4 Size, ADF):

Parameter	Technical Specifications as per Requirement
Scanner type	Portable scanner
Photoelectric device	600 dpi Color CIS with 10368 pixels
Effective pixels	5,100 × 8,400 pixels at 600 dpi
Document size	A4 Size or better
Paper input	Face-down loading
Paper output	Face-down ejection
Paper capacity	Single sheet of paper at 35 to 270 g/m²
Scanning resolution	600 dpi (main scan) / 600 dpi (sub scan)
Output resolution	75, 100, 150, 200, 240, 300, 400, 600 dpi

Image data	16 bits per pixel per color internal, 1 to 8 bits per pixel per color external
Interface	One USB 2.0 Hi-speed port
Light source	RGB 3 color LED
Warranty	3 years comprehensive on-site OEM warranty

9. Interactive Flat Panel Display

Parameter	**Technical Specifications as per Requirement**
Size (Diagonal)	75" or higher
Panel Technology	IPS
Resolution	4K
Brightness	400 nits or higher
Touch Response Time	5mm or less
Ram	8GB or higher
On-board Memory	64Gb or Higher (Expendable upto 512Gb with micro-SD Card)
Processor	Octa-core or Higher
Panel Life	50,000 Hours or Higher
Speaker	Built in (16 W + 16 W) or Higher
Platform	Android 13 (Edla certified) or Higher
Operating System Support	Windows/ Android
Multi touch point	40 And above
Hardness	9H or higher
Panel Features	EDLA Certification, Features-AMS, DMS (App Should be preinstalled by default in IFP for Centralized management tool to manage all the IFP in the network) and Broadcast
Accessory	Power Cable, VGA Cable, HDMI Cable, Type C-C Cable, User manual, Wall Mount Kit
Display Connectivity	Wireless Display/ OPS/ HDMI Display port: 3, C to C port
Power Consumption	77W or less
Connectivity Ports	1- type USB C: 1 X 3.0 & 1 X 2.0, USB Type B (for Touch) 2 X 2.0, USB Type A (2 X 2.0) (2 X 3.0)
On site OEM Warranty (Year)	3 Years Comprehensive

10.Local Storage : NAS 20 TB/ External HDD/ External SSD NAS 20 TB

Parameter	**Technical Specifications as per Requirement**
Storage Capacity	20 TB or higher (Configured as multiple drives)
Interface	PR2100: 2 X USB 3.0 (Expansion Ports)/ PR4100: 3 X USB 3.0 (Expansion Ports)/ One-touch USB import button (Front)/ 2 x Gigabit Ethernet/ 2 x Power Supply (DC in)
Storage	quad core Intel Pentium N3710 processor or higher
RAM	4GB or higher

Data protection	Multiple RAID password protection and 256-bit AES volume encryption
Cloud Support	Cloud OS support
Warranty	Minimum 3 years comprehensive on-site OEM warranty

NAS / External SSD/ HDD : 4 TB/ 10 TB/ 20 TB etc. will be procured as per requirement.
This Local storage : NAS 20 TB/ External HDD/ External SSD is intended for the development, configuration, and local processing of satellite imagery. Additionally, a separate request for approval of storage space at the Data Centre will be submitted. Completed/ Processed data will be stored at the DoIT&C Data Centre.

11.ERDAS Imagine

12.Image processing software with extensions

S. No.	Software	Qty	Approximate Unit Price
1	Imagine Professional with expansion pack	1	20,00,000/-
2	Imagine Photogrammetry with Hardware	1	30,00.000/-
	Total		50,00,000/-
3	Apollo Professional	1	69,95,706/-

DoIT&C is also using ERDAS imagine and Photogrammetry Suit (LPS) for image processing and also managing the Apollo Server to handle satellite imagery, procured through a Single Source RFP published by RISL. The product is additionally available on the GEM portal and can be procured through the PAC buying option to ensure synergy with DoIT&C.

13.LPS (Leica Photogrammetry Suite) with Hardware

Hardware: Photogrammetric Hardware of Suite, Photogrammetric Software along with suitable hardware i.e. Workstation, 3D Mouse, 3D Vision, Desired Graphic Card and 27" 3D Monitor, 3D Vision and 3D Mouse

Software: Hexagon (Imagine Photogrammetry 2022 or latest, Terrain Editor 2022 or latest)

S.N.	Parameter	Minimum Specification
1	Photogrammetry	Yes
2	Type of platform	Desktop based
3	Geocoding capability	Yes
4	Image Exporting capability	Yes
5	Image Management Capability	Yes
6	Interoperability capability/OGC	Yes
7	Spatial Analysis capability	Yes
8	Type of platform	Desktop based
9	Geocoding capability	Yes
10	Image Exporting capability	Yes
11	Image Management Capability	Yes

12	Interoperability capability/OGC	Yes
13	Spatial Analysis capability	Yes
14	No of Training days	5 days
15	Terrain Editor	Yes
16	No of warranty/support available from OEM years	1

14. Minimum System Requirements for Erdas Imagine, Expansion Pack, DSM Extractor, Terrain Editor and Photogrammetry

Sr No.	Components	Specifications
1	Computer/ Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (8 or more logical processors are strongly recommended)
2	Memory (RAM)	32 GB and above
3	Disk Space	1 TB SSD or more
4	Operating Systems	Windows 10 or 11 Pro for Workstations
6	Recommended Graphics Cards for Stereo Display	Any one of the below: **Advance** • NVIDIA® RTX™ A4000, 16 GB GDDR6 and Above **Basic Level** • NVIDIA Q2000 or Above
7	Recommended Stereo Display Monitors	• 120 Hz (or above) LCD Monitors with NVIDIA 3D Vision™ Kit
8	Recommended Stereo Glasses and Emitter kits	• NVIDIA 3D Vision™ Kit
9	Peripherals	All software installations require: • One Windows-compatible mouse with scroll wheel or equivalent input device. • Software security (Hexagon Geospatial Licensing 2022) requires one of the following: • One USB port for hardware key • Advanced data collection requires one of the following hand controllers:9 • TopoMouse™ or TopoMouse USB™ / Immersion 3D Mouse

15. TECHNICAL SPECIFICATIONS OF PHOTOGRAMMETRY SOFTWARE:

Base Project Setup/ Photogrammetric Tools	Software should support rigorous sensor modelling and RPC files of various Camera and Satellite Sensors
	Software should support frame, digital, video and non-metric cameras, as well as satellite sensors (CARTOSAT, Quick Bird, SPOT, Worldview 1, 2 &3, GeoEye, IKONOS, PLEIADES, Planet, Superview, TripleSat, SkySAT etc.)
	Software should manipulate data and track progress in Project Manager
	Software should export image, DTM, and orthophoto footprints along with project GCPs, check points and tie points to KML
	Software should support STEREO / MONO GCP Point Measurement

	capabilities with following functionalities o Automatic point correlation functionality o Support for multiple viewers, which is beneficial for measuring multi-ray points o Cursor tracks in images simultaneously based on sensor model and ground position for easy identification
	Software should support automatic tie point measurement utility with following functionalities o Point pattern selected by operator o Automatic transfer of points between images o Interactive graphical view of tie point patterns
	Software should support satellite block triangulation & aerial triangulation.
	Software should support bundle adjustment of multiple images from one or more sensors (with the same sensor model type)
	Software should support triangulation without ground control if the exterior orientation parameters are available
	Software should auto-detect lack of ray convergence for automatically measured tie points (satellite workflow assistance)
	Software should run Photogrammetry Spatial Recipes to make photogrammetry workflows for easy process.
	Software should provide advanced triangulation report that provides a comprehensive output list of the adjusted and estimated parameters and their accuracies, precisions and photo-coordinate residuals
Stereo Visualization	Software should support unlimited number of stereo windows
	Software should have stereo, split-panel, tri-view (stereo and split panel) and mono views
	Software should support continuous panning and zoom
	Software should support On-the-fly accuracy reporting
	Software should read out ground and image coordinates, 2D and 3D measurements
Automatic DEM/DSM Extraction	Software should have the ability to extract individual DTMs or an entire DTM for a project consisting of many images
	Y Parallax Threshold for stereo pair while point cloud generation.
	Software should output DTM in Raster DEMs, LTF, 3D Shapefiles, ASCII files and LAS formats
	Software should support output DTMs in different projections
	Software should support multi-ray matching that increases correlated terrain point reliability
	Software should support very dense matching capability based on Semi-Global Matching (SGM) supporting digital camera and satellite imagery
	Software should support multiple CPU/Threads support during DTM generation
	Software should support 16-button 3D mouse
DTM (Terrain) Editing Tools	Software should interactively edit DTM's using Stereo Imagery as back-drop reference
	Software should support dynamic display of contours, mass points, break-lines and TINs
	Software should support dynamic update of graphics/contours while editing points and triangles
	Software should support 16-button 3D mouse

	Software should support to automatically load the next stereo pair when reach the cursor to the edge of the stereo imagery
Data Visualization tools	Software should overlay multiple data types (Unlimited data layers) for files over 2GB in size
	Software should have Geographic linking & Sync Views
	Software should Open & Preview Raster as Image Chain
	Software should have interactive Geo-Point tool
	Software should send view or map composition to Microsoft PowerPoint/Word or JPEG
	Software should support On-the-fly resampling
	Software should have Image histogram modification tools
	Software should support Visual change detection between any data types ○ Swipe / Blend / Flicker ○ Automatic Blend and swipe with fine controls over directions and speed ○ Multi-layer "play through" animation
	Software should have Measurement tool with following options ○ Point locations, Lengths, bearings, and angles ○ Polygonal areas and perimeters ○ Height from layover, shadow tip, or shadow base ○ Write measurements directly to vector attribute or on-screen annotation
	Software should have GPS live-link
	Software should support Batch Processing options (Record and Repeat common Functions)
	Software should create an unlimited number of ECW2 /ECW3 and JPEG2000 compressed images from input images with either export or direct-write
	Software should support Bing Maps/ Open Street maps/ Customized Maps within viewer and overlay with Image or vector data
	Software should have Intelligent (sensor-specific) band combination selectors
	Software should have DRA (Live Update) works with all Stretch types
Advanced ortho Mosaicing Tool	Software should have User interface to manage all aspects of the mosaic process including graphics, image display options and advanced color balancing capabilities
	Software should allow to Stitch multiple images with: ○ Differing or like resolution (pixel sizes) ○ Differing or like projection systems
	Software should support automatic seamlines / Manual editing of seamlines with real-time display
	Software should allow to Preview images, its outlines, overlap areas and seamlines
LIDAR Data or point cloud data processing capabilities	Software should Visualize, Analyze, and manage point clouds
	Software should allow you to simultaneously viewpoint clouds in 2D and 3D
	Software should allow subset and reproject of LIDAR datasets
Map Composition	Software should create interactive maps
	Software should allow to copy and paste into Map frame using Microsoft clipboard (PowerPoint, Word, etc.)
Floating licensing	Software should be able to float Licenses on to other machines on the

	network
License Type	Software should have Perpetual License
Ease of Use	Software GUI should be an Integrated Ribbon Interface and highly User friendly Interface
	Software should have Context-sensitive, Hypertext-linked On-Line Help

16. Apollo Server

Intergraph Apollo Professional 8 Core License – 1 (Perpetual) with 1 year ATS (ApolloProf2023)

ERDAS Apollo is a comprehensive data management and delivery platform designed to optimize the use of geospatial resources. It enables efficient storage, management, and dissemination of large volumes of raster, vector, and point cloud data. Leveraging advanced server-side processing, ERDAS Apollo ensures high-performance data streaming in industry-standard formats such as WMS, WFS, WMTS, and ECWP, enabling seamless integration with GIS applications and web services.

The platform features robust cataloging capabilities, allowing users to organize and search geospatial assets effectively. Additional functionalities, such as dynamic mosaicking and on-the-fly re-projection, further enhance data usability, ensuring that geospatial resources are readily accessible and adaptable to diverse analytical and visualization needs.

Hired Manpower:

Technical Consultant-

- **Proposed:** Two Tier-1 Technical Consultants can be hired to provide expert guidance and support in planning and executing the activities of the Sub Centre. Their role would involve overseeing key projects, ensuring alignment with strategic objectives, and leveraging their technical expertise to optimize operations. By bringing in high-level consultants, the Sub Centre can enhance its capacity to deliver high-quality outputs, streamline project workflows, and ensure that resources are effectively utilized to meet the organization's goals.
- **Method**: Hire additional staff through NICSI/RISL/Open Tender as per requirement.
- **Budget Amount**: Rs. 18.00 lacs for 2024-25 and Rs. 72.00 lacs for 2025-26.

Office Support and GIS & RS Technical Manpower-

- **Proposed –** RS and GIS experts (Technical Persons), Multi-Tasking Support (MTS) and Office Assistant Support (OAS) etc. can be hired as per requirement. Tentatively 3 MTS, 3 OAS and 3 Image Processing Experts / Sr. Image Processing Experts/Project Manager/Tech Lead may be hired.
- **Method**: Hire additional staff through NICSI/RISL/Open Tender as needed.
- **Budget** Amount: ₹15.00 lacs for 2024-25 and 60.00 lacs for 2025-26.

Hiring of Technical Consultant (Tier 1)

To facilitate the various initiatives of SRSAC and ensure the seamless implementation of projects, a Remote Sensing consulting unit is proposed. Broad activities of proposed consulting unit are as under:

1. **Strategic Formulation for GIS & Remote Sensing Activities**
   - Develop comprehensive strategies for implementing GIS and remote sensing projects across the state.
   - Assist in comprehensive statewide guidelines for the creation, sharing, and collaboration of geospatial data to enhance data accessibility, interoperability, and stakeholder engagement.
   - Ensure alignment with state and national policies and directives.
2. **Coordination & Collaboration**
   - Coordination with various state and national agencies to gather requirements and gain insights for successful project execution.
   - Develop execution plan, ensuring timely monitoring and evaluation of project milestones and deliverables.
   - Facilitate regular communication and feedback loops among stakeholders to ensure alignment and address challenges promptly.
3. **Standardization of Datasets and Processes**
   - Design standard operating procedures for various remote sensing activities.
   - Establish and implement standards for Geo-Spatial data models to ensure consistency, accuracy, and interoperability.
   - Streamline processes for data collection, processing, and analysis to enhance efficiency and reliability of outcomes.
   - Promote the adoption of best practices and innovative technologies in remote sensing and GIS.
4. **Capacity Building**
   - Design and conduct training programs to enhance the skills and knowledge of state personnel in GIS and remote sensing technologies.
   - Develop resources and materials to support ongoing learning and professional development.
   - Foster a culture of continuous improvement and innovation within the state's remote sensing community.
5. **Technology Assessment and Integration**
   - Evaluate current GIS and remote sensing technologies used by the state and recommend enhancements or new technologies to improve efficiency and accuracy.
   - Design solution architectures and integration frameworks for seamless roll-out
   - Facilitate the integration of cutting-edge technologies such as machine learning and AI in data analysis and interpretation.
6. **Program Management**
   - Establish clear performance metrics to evaluate the success of GIS and remote sensing projects.
   - Prepare regular reports and presentations for stakeholders to showcase progress and outcomes, highlighting areas for improvement and success stories.
   - Assist in the efficient allocation of resources, including financial, human, and technological assets, to maximize project impact.

- Monitor project budgets and expenditures, ensuring fiscal responsibility and transparency.

Expected Outcomes by establishing Remote Sensing Consulting Unit

- Strategic framework to guide statewide GIS and remote sensing activities.
- Improved coordination and collaboration among state and national agencies.
- Standardized datasets and processes that enhance data quality and project delivery.
- Increased capacity and capability of state resources to sustain GIS and remote sensing initiatives.
- Enhanced decision-making capabilities through improved data accuracy and availability.
- Strengthened institutional capacity to manage and execute large-scale GIS and remote sensing projects.
- Increased stakeholder engagement and support for state initiatives.
- Long-term sustainability and resilience of geospatial infrastructure and initiatives.

In the light of above, a remote sensing consulting unit comprising 2 consultants of below categories is proposed for 1 year to initiate the envisaged activities and same may be expanded based on on-going needs & evolved requirements.

Cost Breakup:

#	Category	Base Rate	Base Rate including NICSI Charges (9%)	Base Rate including NICSI Charges (9%) & GST (18%)
1	Consultants with 10 yrs and < 15 yrs experience (Management/Functional/Technology Profile)	3,47,288.00	3,78,543.92	4,46,681.83
2	Consultants with 6 yrs and < 1o yrs experience (Management/Functional/Technology Profile)	3,18,347.00	3,46,998.23	4,09,457.91
3	Consultants with 3 yrs and < 6 yrs experience (Management/Functional/Technology Profile)	2,72,042.00	296525.80	349900.40
4	Consultants with < 3 yrs experience (Management/Functional/Technology Profile)	2,43,101.00	264980.10	312676.50

The tentative budget for the remote sensing consulting unit is ₹18.0 lacs for 2024-25 and 72.0 lacs for 25-26, based on current NICSI rates, with adjustments to be made according to the rates provided by NICSI at the time of execution. The category of consultant to be hired will depend on the requirement but total cost will not exceed from the allotted budget.

Details of Office Support Manpower and GIS & RS Technical Manpower

SNO.	Manpower Categories	Approximate cost (without taxes and Service charges)
Office support Manpower		
1	Multi Tasking Support	20000 + taxes
2	Office Assistant Support	40000 + taxes
GIS/RS Technical Experts		
3	Project Manager	102981.02+taxes
4	Tech-Lead	75519.56+taxes
5	Sr. Image Processing Expert	54922.92+taxes
6	Image Processing Expert	41192.19+taxes
7	GIS Developer	60000+taxes
8	Sr. GIS Developer	75000+taxes
9	GIS Operator	27461.46+taxes

- **Hired Technical and office Manpower to be hired through RISL/NICSI/Tender**
- **Office support and GIS/RS Technical manpower will be hired as per the requirement of the projects assigned, but the total cost will not exceed the sanctioned budget amount.**
- The tentative budget for the **Office support and GIS/RS Technical manpower** is ₹15.0 lacs for 2024-25 and 60.0 lacs for 25-26, based on current NICSI rates, with adjustments to be made according to the rates provided by NICSI at the time of execution. The category of consultant to be hired will depend on the requirement but total cost will not exceed from the allotted budget.

Financial Implication:

As per Budget Announcement 2024-25 (22.3), the SRSAC's Sub Centre has been approved at Jaipur. The budget approved by FD is as follows -

(Rs. in Lakh)

Hardware, Software and Other expenses					
S.N.	**Particulars**	**Qty**	**Object Head**	**Amount Sanctioned for FY 2024-25 [3 Months]**	**Amount Sanctioned for FY 2025-26 onwards**
1	Workstation/ Desktop/ Laptop/UPS/ Plotter/MFP/ Printer/Scanner / etc.	Tentative: 20 Work stations/ Desktops 3 printers- BW/Color), 1-MFP, 2 scanners, 2 laptops and 1 Scanner cum	57	49.90	49.15

		Plotter or separate			
2	GIS / Remote Sensing Software –Arc GIS Pro, ERDAS Imagine, LPS etc.	5+2+1 Licenses	57	50.00	70.00
Total				**99.90**	**119.15**

(Rs. in Lakh)

Hired Manpower

S.N.	Particulars	Qty	Object Head	Amount Sanctioned for FY 2024-25 [3 Months]	Amount Sanctioned for FY 2025-26 onwards
1	Technical Consultant [Rs. 3.00 lacs per month]**	2	41	18.00	72.00
2	Hired Technical Person/ MTS/ क्लर्क स्तर के कार्मिक through NICSI/ RISL/ संविदा के द्वारा किराये पर Hired Technical and office Manpower to be hired through RISL/NICSI/Tender MTS/OAS/Project Manager/Tech. Lead / Sr. Image Processing Expert/ GIS Operator or equivalent, as per requirement	As per requirement	41	15.00	60.00
Total				**33.00**	**132.00**

**** The amount sanctioned for the post of Technical Consultant is estimated Rs. 3.00 Lacs per month however this may be lowered as per the requirement and nature of work.**

The overall estimate cost of the project proposal is Rs. 384.05 Lakh (132.90 Lakh for F.Y. 2024-25 and 251.15 Lakh for F.Y. 2025-26).

Fund Management:
Expenditure be met from the funds available with DST.

The Committee accords technical approval on the project proposal having estimated cost of Rs. 384.05 Lakh.

5. Project : Upgradation of SAP ERP System and adoption of revised hardware proposal for SAP-RISE at BSDC, Jaipur (RVPNL)

Earlier the project proposal of "Up-gradation of SAP-ERP from ECC to 4-HANA on SAP-RISE platform" was technically approve in 96th meeting of SeMT dated 23-06-2023, verbatim of the same is as follows:

> **"RVPNL will host the SAP RISE on SAAS model at Bhamashah State Data Center with estimated cost of Rs.4890.00 Lakh (excluding GST) for 5 Years.**
>
> **The committee accords technical approval on the proposal having estimated cost of Rs.4890.00 Lakh. The procurement process may be initiated by RVPNL to engage SAP to establish Cloud Datacenter at BSDC for the purpose."**

The approved setup will be on a subscription basis, amounting to Rs. 57.69 Crore. This is in response to the proposal submitted by RVPN, which initially estimated the cost at Rs. 37.88 Crore, based on the MeITY-approved Cloud Data Centre.

Accordingly, RVPN issued a work order to M/s. SAP India Pvt. Ltd. on dated 30-09-2023. As per communications received from M/s. SAP India Pvt. Ltd., the firm is supplying "Lenovo" make hardware.

However, DoIT&C, vide letter dated 26th March 2024, declined to accept the "Lenovo" make hardware at BSDC. This decision was in compliance with the Finance (G&T) Department, GoR order No.F.2(1)FD/G&T-SPFC/2017 dated 15-01-2021, and the office memorandum issued by the Government of India (F.No 6/18/2019-PPD dated 23-07-2020, along with the clarification dated 08-02-2021).

Further according to DoIT&C letter dated 27th June-2024, M/s SAP India Pvt. Ltd. has been instructed to supply compliant hardware as per the RTPP Act & Rules and Land Border Clause requirements for the upgradation of the SAP-ERP system of RVPN, currently hosted at the BSNL Data Centre.

After multiple discussions & meetings, M/s. SAP India Pvt. Ltd. has furnished a final revised proposal on dated 23th Dec 2024, with compliant hardware (HP make) amounting to Rs. 69.71 Crore for the setup of the SAP-RISE CDC model at BSDC, including the upgradation from SAP-ERP ECC to S/4-HANA implemented as a SaaS (Software as a Service) basis.

The reasons cited for escalated prices as explained by M/s. SAP India Pvt. Ltd. specifically are: -

- **Change in Infrastructure:** The transition from Lenovo to HPE hardware has resulted in a higher cost due to enhanced configurations, such as new generation chipsets, increased CPU cores, greater SAPS, and upgraded switches, along with other associated hardware components.
- **Revision in Managed Services Costs:** The upward revision of the managed services cost is attributed to the hardware change.

This proposal represents a 20.81% increase over the original amount of Rs. 57.69 Crore and is valid upto 31 January 2025. After this date, M/s SAP India Pvt. Ltd. will not extend the validity of revised quoted prices.

Looking the criticality and dependability of RVPN on SAP-ERP, RVPNL requested the technical approval of the State e-Governance Mission Team (SeMT) to adopt the compliant hardware proposal (HP make) with the escalated cost amounting to Rs. 69.71 Crore including GST from Rs.57.69 Crore on a subscription basis at Bhamashah State Data Centre (BSDC), Jaipur.

Financial Implication:
The estimated cost of project proposal is Rs. 6971.00 Lakh.

Fund Management:
Expenditure would be met from the funds available with RRVPNL.

The Committee accords technical approval on the project proposal with the following directions-

1. **RVPNL may negotiate on the price proposed by M/s SAP India Pvt. Ltd. for the aforesaid work as it seems higher side in comparison to the earlier approval, before going ahead with the procurement.**
2. **RVPNL to get detailed technical specification of the hardware items being used in the aforesaid project.**
3. **It should be ensured that the project cost finalized after negotiation from M/s SAP India Pvt. Ltd. should be overall final cost for 5 years without any hidden charges.**
4. **There should be provision of Data Centre charges in the project, if any.**

6. Project : Request for approval of Revised Cost of RERA Version 1.0 Project from 421.45 Lakh to 500.00 Lakh (RERA)

Background:

Government of India has enacted the Real Estate (Regulation and Development) Act 2016 and all the provisions of the Act have come into force as on May 1, 2017. Under this Act, Government of Rajasthan has notified the Rules, namely, the Rajasthan Real Estate (Regulation and Development) Rules, 2017. Constituted under the said Act and Rules, Rajasthan RERA is working towards development of real estate sector by maintaining transparency, accountability and financial discipline; ensuring compliances; and protecting buyers' interests.

At present, in Rajasthan RERA, initial stages of various processes are online, while mid-stream processes and end-processes as also follow up and monitoring are off-line. But the vision of the RERA Act is to move towards full automation of RERA's processes. The present version was approved in 79th meeting of SeMT with a total project cost of Rs. 421.45 lakh. The project, which includes application development and a four- year Facility Management Service (FMS).

The present application has its own limitation and various features like Geo tagging, Advance Analytics etc. may not be built upon it as its architecture is very basic.

For technical advancement of the existing IT application of RERA & to overcome the challenges of current version, it is suggested that existing application need to be replaced with advance solution. In reference to the minutes of the 96th meeting of SeMT dated 23-06-2023 under the chairmanship of Additional Chief Secretary, DOIT&C, the proposed ERP solution of Real Estate Regulatory Authority (RERA) was approved having the estimated cost of Rs 295 Lacs.

Break-up of the financial cost estimates of Phase- I:

Team for Application Development Work						
SN	Category of Resource	No. of years of experience	No. of Resource Required	Tentative Efforts in Months	Approximate Remuneration per month (incl. GST)	Total Remuneration per month including GST
1	Technical Project Manager	10	1	12	2,27,723.00	27,32,676.00
2	Senior DevOps	7+	1	12	1,88,860.00	22,66,320.00
3	DevOps	5+	1	12	1,36,361.00	65,45,328.00
4	Technical Assistant	3	3	12	30,000.00	10,80,000.00
5	Help Desk	2	1	12	30,000.00	3,60,000.00
6	Consultant with <3 Yrs exp.) (Management/ Functional Profile)	3	1	4	2,72,722.00	10,90,888.00
				Grand Total (For Application Development Work)		**1,40,75,212.00**

Team for FMS Work (For 4-year post development)						
Sr #	Category of Resource	No. of years of experience	No. of Resource Required	Tentative Efforts in Months	Approximate Remuneration per month (incl. GST)	Total Remuneration per month including GST
1	DevOps	7+	3	48	1,36,361.00	1,96,35,984.00
2	Technical Assistant	3	2	48	30,000.00	28,80,000.00
3	Help Desk	2	1	48	30,000.00	14,40,000.00
					Grand Total (For FMS)	**2,39,55,984.00**

Summary of the Total Estimated Cost for Phase-I

Sr.#	Item Description	Total Estimated Cost in INR Including Tax
1	Application Development Cost (1 year) including FMS of 4 Years Note: CAPEX cost includes one-time application development cost including a cost of integrations with other apps and development of mobile app, security audit.	1,40,75,212
	OPEX cost includes 4 Year FMS cost of application maintenance and support which includes any change request or update of patches and overall ensuring uptime of application.	2,39,55,984
2	Training Cost Note: One-time training cost of RERA officers, participants from builder association, and participants from agent association.	45,500
	Total Cost	3,80,76,696
3	Contingency Cost (B) @ 2% of Total Cost (A)	761,534
4	Contingency Cost (B) @ 2% of Total Cost (A)	761,534
5	Total Cost (C = A + B)	3,88,38,230
6	RISL Charges (D)	33,07,058
	Grand Total – Overall Project Cost (C + D)	**42,145,288 (Say Rs. 421.45 Lakh)**

Break-up of the financial cost to maintain the existing application:

Team for Application Maintenance						
SN	Category of Resource	No. of years of experience	No. of Resource Required	Tentative Efforts in Months	Approximate Remuneration per month (incl. GST)	Total Remuneration per month including GST
1	Consultant with > 10 & < 15 yrs experience	10+	1	8	4,25,000.00	34,00,000.00
2	Senior DevOps	7+	2	9	2,20,000.00	39,60,000.00
					Grand Total (For Application Maintenance)	73,60,000.00

In the bidding process of ERP solution RERA, the work order of amount ₹1.28 Cr (excluding GST) was issued to Dev Information Technology Ltd on 18th September 2024 to start working on ERP solution. Now to maintain current application, budget is increased from ₹4.21 Cr to ₹5 Cr which may be meet out from the saving of ERP solution RERA which is ₹1.67 Cr (₹2.95 - ₹1.28) approximately.

The Committee accords revised technical approval on the project proposal having estimated cost of Rs. 500.00 Lakh.

Meeting ended with the vote of thanks to the chair.

This bears the approval from competent level.

(Akhilesh Mittal)
Technical Director

Copy for information and necessary action to:

1. PS to Addl. Chief Secretary, Finance Dept., Rajasthan, Jaipur
2. PS to Addl. Chief Secretary, Home Dept., Rajasthan, Jaipur
3. PS to Secretary, Labour & Employment Department, Jaipur
4. PS to Secretary and Commissioner, Science & Technology Department, Jaipur
5. Sr. PS to Secretary and Commissioner, Dept. of TI&C, Jaipur
6. PS to Special Secretary, Planning Dept., Rajasthan, Jaipur
7. PS to Managing Director, Rajasthan State Vidhyut Prasaran Nigam Ltd., Jaipur
8. PS to Commissioner, Labour Department, Rajasthan, Jaipur
9. PA to Director, State Insurance & Provident Fund Dept., Rajasthan, Jaipur
10. PA to Joint Secretary, Finance (Expenditure-III) Dept., Raj., Jaipur
11. PA to Director (Technical), RajCOMP Info Services Limited, Jaipur
12. PA to Director, LNMIIT, Jaipur
13. PS to DDG & SIO, NIC, Rajasthan, Jaipur
14. PA to Joint Secretary To Government, Home (Police) Dept., Jaipur
15. Shri Mukesh Arora, Technical Director, Dept. of IT&C, Jaipur
16. Shri Rajeev Jain, Technical Director, Science & Technology Department, Jodhpur
17. Shri Pradeep Kumar Varshney, Technical Director, SCRB, Jaipur
18. Shri M.K. Tibrewal, ACE (IT), RVPN, Jaipur
19. Registrar, Rajasthan Real Estate Regulatory Authority (RERA), Rajasthan, Jaipur
20. Smt. Poonam Choudhary, Chief Accounts Officer, Dept. of IT&C, Jaipur
21. Shri Shripal Khowal, S.A. (Joint Director), Finance Dept., Jaipur
22. Shri D.K. Dixit, XEN (MIS & IT), RVPNL, Jaipur
23. Shri Anshu Jain, AEN (MIS & IT), RVPNL, Jaipur
24. Smt. Madhu Bala Jain, Programmer, Labour Department, Jaipur
25. OIC- Website to upload the MoM on the website of DoIT&C

Technical Director

DOIT.C
Department of Information Technology & Communication, Rajasthan

GOVERNMENT OF RAJASTHAN
Department of Information Technology & Communication

Annexure-"A"

103rd Meeting of SeMT held on 24-01-2025 - List of Attendees

S. No.	Name of officer	Designation
1.	Smt. Archana Singh	Secretary & Commissioner, Dept. of IT&C/ Chairperson, SeMT
2.	Shri Nathmal Didel	Managing Director, RVPNL, Jaipur
3.	Shri Sharat Kaviraj	Inspector General of Police, SCRB, Jaipur
4.	Smt. Kashmi Kaur	Joint Secretary, Home Department
5.	Shri Mahendar Sharma	Sr. D.S., Energy Department
6.	Shri Anil Kumar Singh	Director (T), RISL
7.	Shri Akhilesh Mittal	Technical Director, Dept. of IT&C
8.	Shri Mukesh Arora	Technical Director, Dept. of IT&C
9.	Shri Rajeev Jain	Project Director, SRSAC, DST
10.	Shri Jitendra Verma	SIO, NIC, Rajasthan
11.	Shri Sunil Bansal	Sr. Addl. Director, SI&PF Department
12.	Shri Ramesh Singh	A.D., Panning Department
13.	Shri M.K. Tibrewal	ACE (IT), RVPNL
14.	Shri Om Prakash Saharan	Addl. Labour Commissioner
15.	Shri Mahesh Sharma	Addl. SP, SCRB
16.	Shri Om Prakash Jatawat	S.A. (Joint Director), Dept. of IT&C
17.	Shri Rajkumar Singh	S.A. (Joint Director), Dept. of IT&C
18.	Shri Shripal Khowal	S.A., Finance Department
19.	Shri Manoj Pareek	Dy. SP, SCRB
20.	Shri A.K. Bhatia	Executive Engineer (MIS), RVPNL
21.	Shri Madhu Sudan Sharma	AAO-I, RERA
22.	Shri Satish Chand Gupta	AO, Finance (Exp.-III)
23.	Smt. Madhu Bala Jain	Programmer, Labour Department

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