REQUEST FOR PROPOSAL

FOR SELECTION OF SYSTEM INTEGRATOR

FOR

INSTALLATION OF CCTV AT

3 STRATEGIC LOCATIONS AT HNAHTHIAL TOWN

GOVERNMENT OF MIZORAM
POLICE HEADQUARTERS
MIZORAM : AIZAWL

CALENDAR OF EVENTS AND OTHER RELEVANT DETAILS

Sl. No.	Information	Details
1	RFP No. and Date	**RFP No. 2 of 2024-25**
2	Non Refundable Tender Cost	Rs. 500/-
3	Sale of Document	RPF documents can be purchased at Provisioning Branch, PHQ, Aizawl or downloaded from Mizoram Police Website www.police.mizoram.gov.in
4	EMD	2% of bid amount
5	Last date (deadline) for receipt of RFP	**06/03/2025** upto **12:00 hrs**
6	Place, Time and Date of opening of Technical / Financial RFP received	Office of AIGP (Mod.) , Police Hqrs., Khatla, Aizawl on **06/03/2025** at **14:00 hrs**
7	Contact Person for queries	AIGP (Mod.), Police Hqrs., Khatla, Aizawl, Phone No: 0389 – 2335225
8	Addressee and Address at which RFP is to be submitted	DGP, Mizoram, Police Hqrs., Khatla, Aizawl

GLOSSARY OF TERMS

Abbreviation	Description
AMC	Annual Maintenance Contract
ANPR	Automatic Number Plate Recognition
BoM	Bill of Material
BoQ	Bill of Quantities
CB	Capacity Building
CBT	Computer Based Training
CCTV	Closed Circuit Television
DPR	Detailed Project Report
HDD	HardDisk Drive
HHS	Hand Holding Support
HQ	Headquarters
HR	Human Resource
IP	Internet Protocol
IT	Information Technology
ISO	International Organisation for Standardisation
LAN	Local Area Network
NAS	Network-attached storage
OC	Officer-in-Charge
OS	Operating System
PC	Personal Computer
PIMR	Project Implementation and Monitoring Report
PMIS	Project Management Information System
PoE	Power over Ethernet
PSI	Police Sub Inspector
RFP	Request for Proposal
SI	Systems Integrator
SLA	Service Level Agreement
SOP	Standard Operating Procedure
SP	Superintendent of Police
SRS	System Requirement Specifications
UAT	User Acceptance Testing
UPS	Uninterrupted Power Supply
UTP	Unshield Twisted Pair

CONTENTS

Name of the Project / Initiative	**Selection of System Integrator for Installation of CCTV at 3 strategic locations of Hnahthial town**
Locations	**1. Northern Entry and Exit point near Jonathan-a Pa Filling Station** **2. Northeast Entry and Exit point at Thingsai Peng** **3. Southern Entry and Exit point near the Sericulture Farm** **4. Central Command Control Centre at Hnahthial Police Station**
Project Implementation Period	**50 days** **Please refer Section 4, page 18 for the detail timelines**

1. INTRODUCTION

The use of CCTV cameras has become increasingly popular in recent years due to their ability to provide real-time monitoring and surveillance. The installation of CCTV cameras provides law enforcement agencies with an additional layer of security, allowing them to monitor and track any suspicious activities. The purpose of this project is to install a CCTV system in Hnahthial town at following locations to deter motorcycle theft and vehicles smuggling:

1. Northern entry and exit point near Jonathan-a Pa Filling Station
2. Northeast entry and exit point at Thingsai Peng
3. Southern entry and exit point near the Sericulture Farm

2. OBJECTIVES

The main objective is to deter motorcycle theft and vehicle smuggling. The installation of CCTV surveillance at the key entry and exit points of Hnahthial town is a strategic initiative aimed at enhancing public safety and securing the town against a range of criminal activities, with a particular focus on deterring motorcycle theft and vehicle smuggling, as these are among the most pressing concerns for the local community. The deployment of advanced surveillance systems is expected to deliver significant benefits, both in terms of crime prevention and law enforcement:

2.1 - CRIME DETERRENCE THROUGH VISIBLE SURVEILLANCE

The presence of CCTV cameras, combined with ANPR technology, at critical entry and exit points will serve as a powerful deterrent to would-be criminals. Knowing that their actions, including vehicle movements, are being monitored and recorded significantly reduces the likelihood of engaging in illegal activities such as motorcycle theft and vehicle smuggling. Criminals often seek out areas with minimal surveillance to avoid detection, and the installation of these systems, particularly with the ability to automatically identify and track vehicles, will make it clear that the town is actively monitoring its borders. This visible presence of security measures, bolstered by ANPR, is likely to push potential offenders to reconsider or relocate their activities, thereby reducing the incidence of such crimes within the town..

2.2 - REAL-TIME MONITORING AND RAPID RESPONSE

The CCTV system, enhanced with ANPR, will provide real-time monitoring capabilities, allowing law enforcement to observe suspicious activities, including vehicle movements, as they unfold. This is crucial in preventing motorcycle theft and vehicle smuggling, as it enables a swift response from the authorities. If a theft or smuggling attempt is detected, particularly through automatic recognition of license plates, law enforcement can be alerted immediately, allowing for rapid deployment to the scene. This quick reaction time can be the difference between recovering stolen vehicles and apprehending criminals or losing valuable assets and allowing offenders to escape. The ability to monitor, identify vehicles via ANPR, and respond

in real-time significantly enhances the town's security posture and contributes to a safer environment for its residents.

2.3 - EVIDENCE COLLECTION AND CRIMINAL PROSECUTION

In the unfortunate event that a crime does occur, CCTV footage provides invaluable evidence that can be used to identify perpetrators and support prosecution. High-definition cameras installed at strategic points will capture clear images of vehicles and individuals involved in criminal activities. This footage can be used by law enforcement to track down stolen vehicles, dismantle smuggling networks, and bring offenders to justice. The availability of such evidence not only aids in solving crimes but also serves as a strong deterrent, as criminals are aware that their actions are likely to be recorded and used against them in court.

2.4 - ENHANCING COMMUNITY CONFIDENCE AND SECURITY

The successful implementation of CCTV surveillance will contribute to an overall sense of security and well-being among the residents. Knowing that the town is taking proactive steps to protect their property and prevent crime can increase public confidence in local law enforcement and governance. This increased trust can lead to greater community cooperation with police efforts, such as reporting suspicious activities or providing additional information that could aid in crime prevention. A secure environment where the risk of motorcycle theft and vehicle smuggling is minimised can also have positive socio-economic impacts, encouraging investment, and fostering a safer community.

2.5 - INTEGRATION WITH BROADER SECURITY INITIATIVES

The CCTV installation at the entry and exit points of Hnahthial town can also be integrated into broader regional security initiatives. This integration enhances the town's ability to share information and coordinate with other jurisdictions, especially in cases where smuggling networks operate across multiple areas. By contributing to a larger security framework, Hnahthial can play a pivotal role in combating organised crime, not just within its own borders but in the surrounding region as well. This

collaborative approach maximises the effectiveness of the CCTV system and amplifies its impact on reducing crime.

In conclusion, the installation of CCTV systems at Hnahthial town's entry and exit points is a critical step in deterring motorcycle theft and vehicle smuggling. The benefits of this initiative extend beyond simple crime prevention; it enhances real-time response capabilities, aids in the collection of prosecutable evidence, boosts community confidence, and integrates the town into broader security efforts. By investing in this technology, Hnahthial is positioning itself as a safer, more secure town, where residents can live with greater peace of mind and where criminals are increasingly likely to be caught and prosecuted.

3. SCOPE OF WORK

The scope of work for the installation of the CCTV surveillance system at Hnahthial town key entry and exit point is comprehensive and carefully structured to address the specific security challenges identified in the region. The project aims to establish a robust surveillance network, ensuring that all vulnerable locations are effectively monitored to deter and detect criminal activities. The surveillance system will be deployed across three critical entry and exit points. Each location has been selected based on its strategic importance and vulnerability to criminal activities.

3.1 - INSTALLATION AND INTEGRATION

The installation and integration of the CCTV surveillance system in Hnahthial Town entry and exit points marks a critical step in enhancing local security. This project, will be implemented in multiple phases. Each phase is meticulously planned to ensure the system's reliability, effectiveness, and longevity. The process begins with the erection of galvanised iron poles, which serve as the foundational infrastructure for mounting the surveillance cameras. These poles are strategically placed in high-risk areas identified through careful assessment, ensuring that key entry and exit points are thoroughly monitored.

Following the installation of the poles, advanced CCTV cameras will be deployed, these cameras are designed to withstand the region's diverse environmental conditions while providing uninterrupted, high-definition video feeds. Once the cameras are in place, the next phase involves the laying of fibre optic cables, which will transmit the video data to the central command and control centre. Cable routing is carefully planned to minimise signal loss and protect against potential hazards. Finally, the central command centre, equipped with cutting-edge monitoring technology, will serve as the hub for the entire surveillance network, enabling real-time monitoring and quick response to any security incidents. The installation and integration will follow the following phases:

3.1.1. ***Phase 1***: ERECTION OF GALVANISED IRON POLE

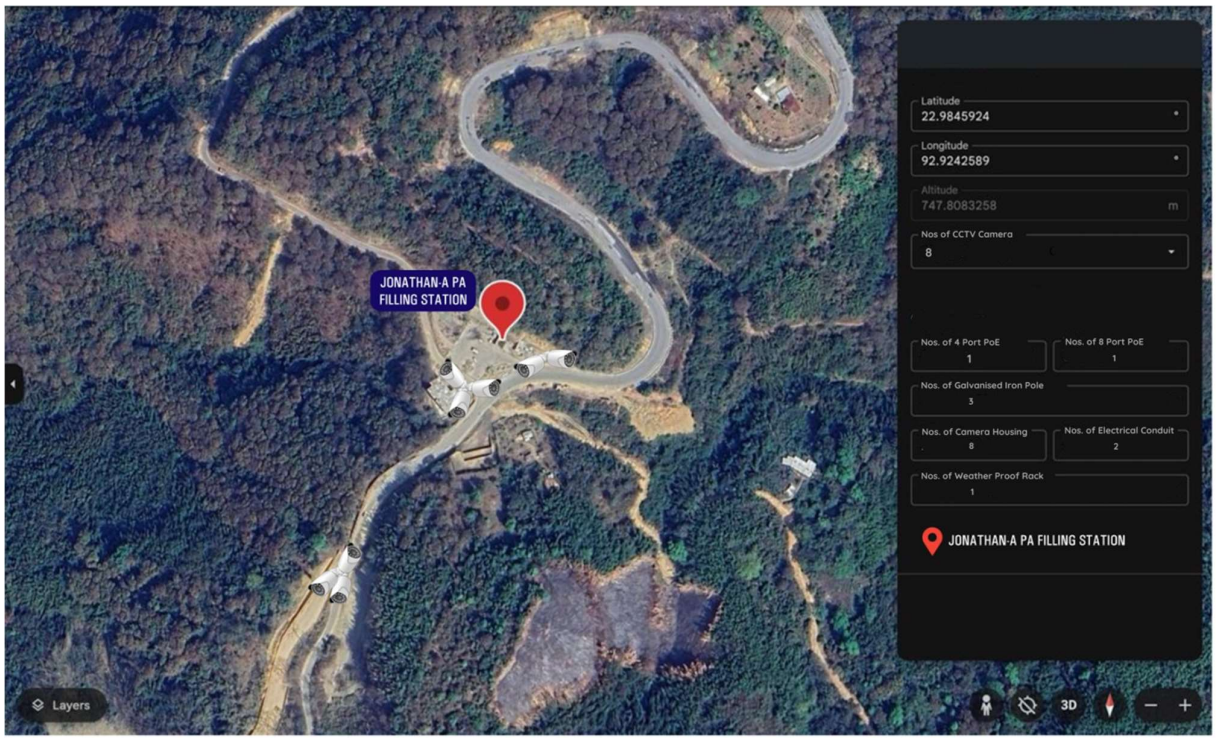
The first phase of the project will be erection of galvanised iron pole with a diameter of 3.6 inch and 6 meter long at the selected location. Near Jonathan-a Pa Filling Station, three galvanised pole will be erected, one facing North, another facing South and the third one near the bypass road situated 200 meter from the filling station. On Thingsai Peng Junction the nearest electrical pole is located 500 meter away, thus indicating a need to erect new pole, to counter this problem, similar galvanised pole will be erected along the route to Thingsai Peng from the last pre-install electrical pole, it was estimated that 30 number of galvanised pole is needed for the site for electrical and fibre optic line. On last location near Sericulture a single pole will be erected.

3.1.2. ***Phase 2***: CAMERA INSTALLATION

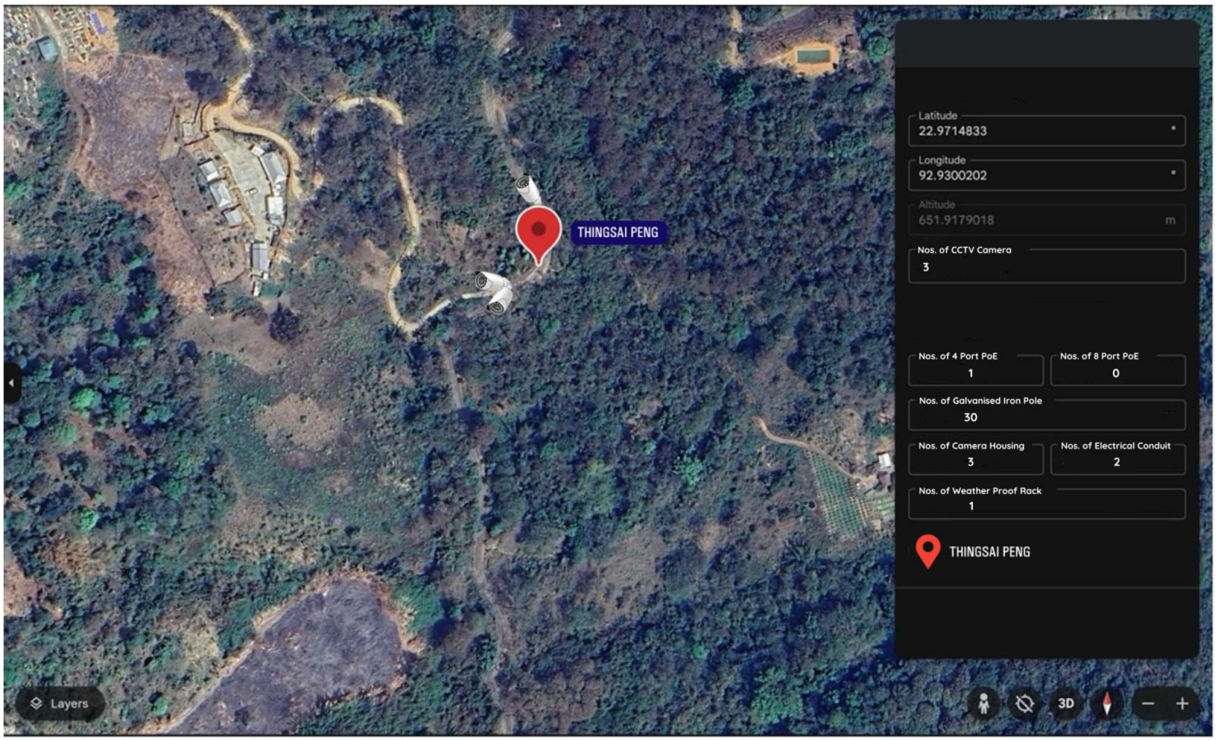
After the galvanized iron poles are erected, CCTV cameras with all-weather housing will be installed at each location to ensure durability and continuous operation under varying environmental conditions. Each camera setup will include Power over Ethernet (PoE) for efficient connectivity, surge protectors to safeguard against electrical disturbances, and power backup systems to maintain functionality during power outages. In addition to the CCTV cameras, one ANPR system will be installed at each location, enabling automatic detection and recording of vehicle license plates. Weatherproof racks will also be installed to securely house and protect the equipment, ensuring long-term reliability.

The diagram below provides a detailed overview of the camera deployment plan, including the exact number of cameras and their designated locations. This visual representation outlines the strategic placement of each camera to ensure comprehensive coverage of all critical areas. By referencing this diagram, stakeholders can gain a clear understanding of how the surveillance network is structured to maximise security and monitoring effectiveness.

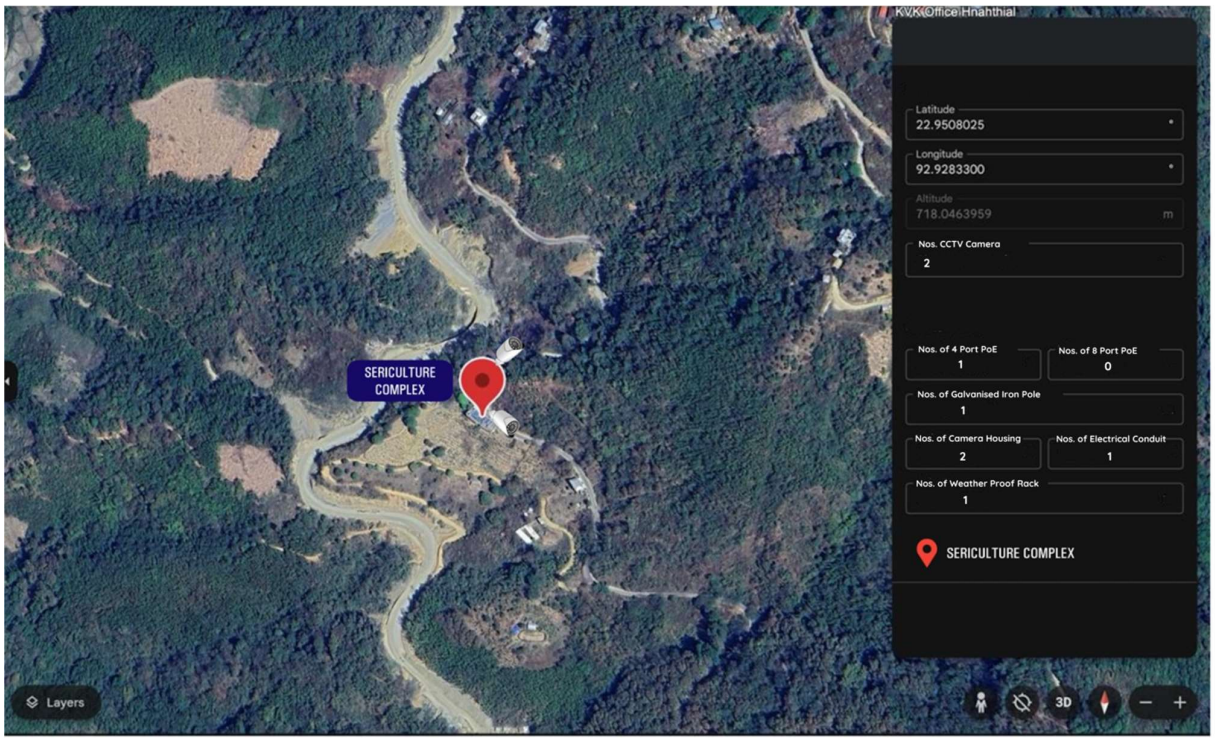
3.1.2.1. Diagram: Jonathan-a Pa Filling Station



3.1.2.2. Diagram: Thingsai Peng



3.1.2.3. Diagram: Sericulture Complex



3.1.3. ***Phase 3***: CABLE LAYING

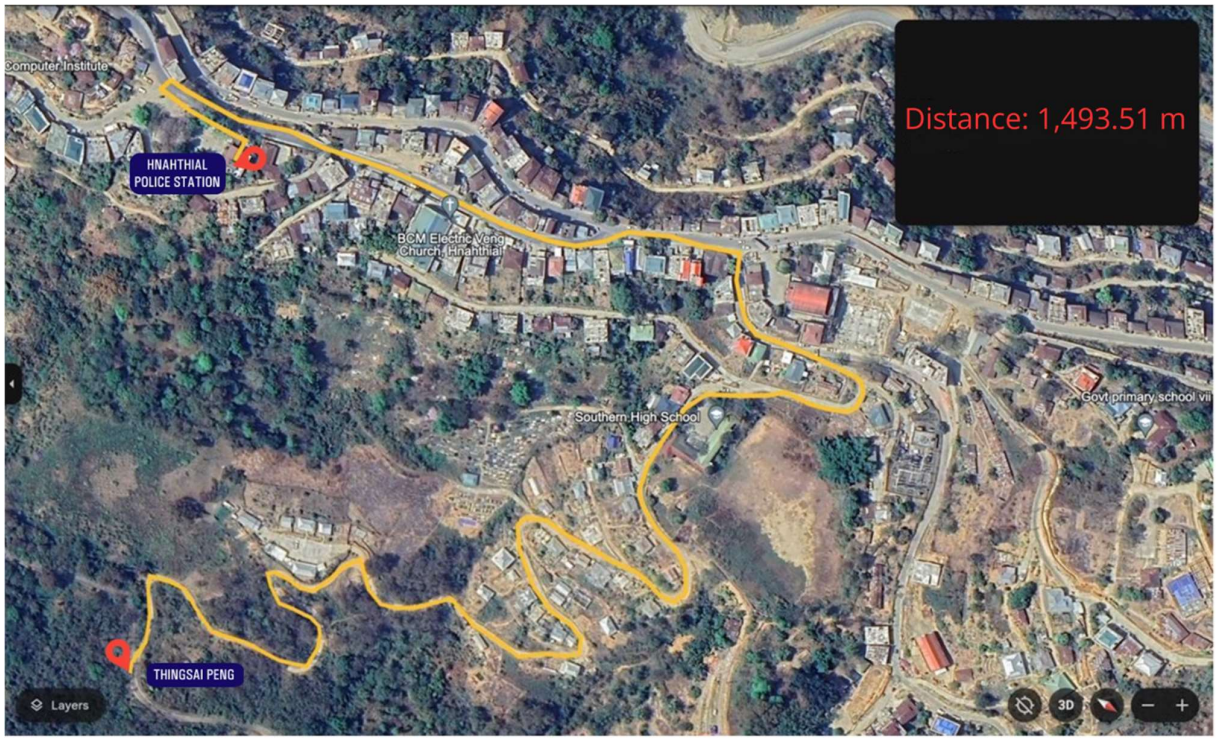
After the poles are erected and the cameras are securely mounted, the next phase of the project will focus on laying the fibre optic cable. Although the direct distance between the camera sites and the central command and control centre is approximately 6,500 meters, industry best practices for fibre optic installation suggest adding an additional 15% to the cable length. This increase accounts for routing adjustments, bends, and service loops, bringing the total cable length to approximately 7,500 meters.

During the cable laying process, several key steps will be followed to ensure optimal performance and durability. The route will be meticulously planned to avoid physical obstacles and minimise signal loss, while protective conduits will be used where necessary to shield the cable from environmental hazards. Careful attention will be given to maintaining the appropriate tension and bend radius to prevent damage to the cable. Additionally, service loops will be incorporated at strategic points to allow for future maintenance and adjustments. These practices will ensure that the fibre optic infrastructure is robust, reliable, and capable of delivering high-

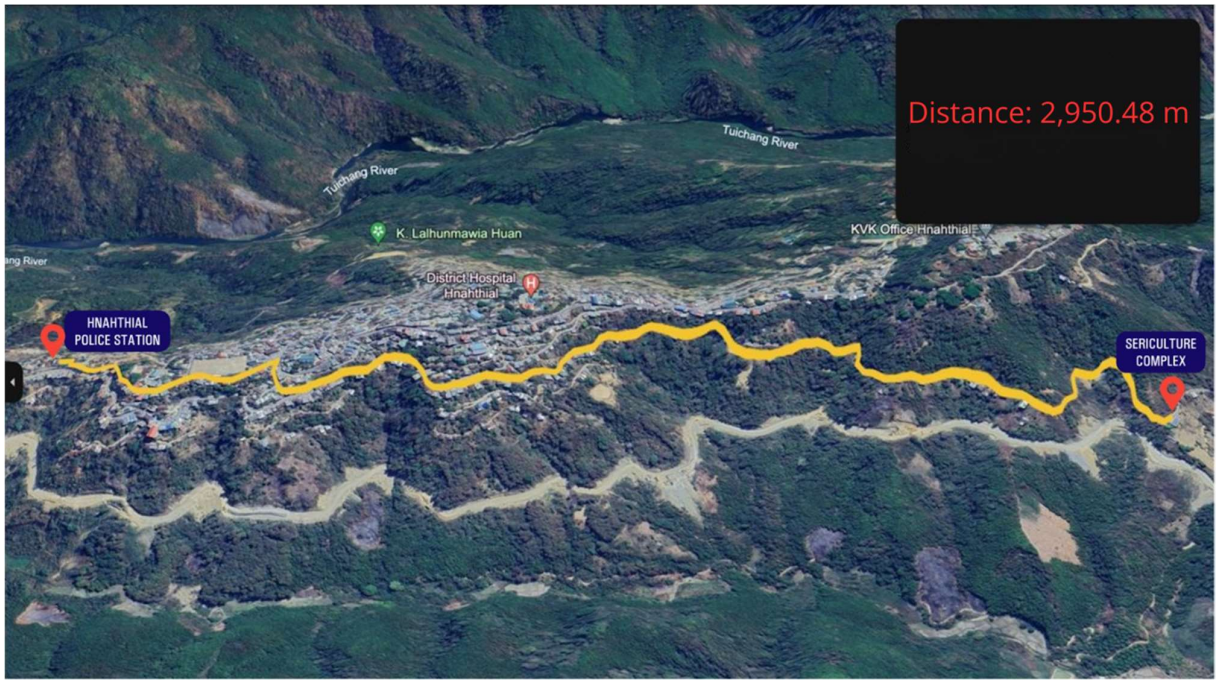
speed data transmission for effective monitoring and control of the CCTV surveillance system. The cable length and routing will be determined based on the following diagram:

3.1.3.1. Diagram: Jonathan-a Pa Filling Station To Hnahthial Police Station

3.1.3.2. Diagram: Thingsai Peng To Hnahthial Police Station



3.1.3.3. Diagram: Sericulture Complex To Hnahthial Police Station



3.1.4. ***Phase 4***: SETTING UP THE CENTRAL COMMAND AND CONTROL CENTRE

After the fibre optic cable is laid, the next critical step involves integrating the surveillance systems with the existing security infrastructure. This phase includes connecting the CCTV cameras to the central command and control centre, which will be outfitted with state-of-the-art surveillance equipment. The command centre will be equipped with two HD monitors for real-time viewing, and two power conditioning unit to ensure a stable and reliable power supply, and two numbers 8 channel network video recorder (NVR) to store and manage the high-definition video footage.The integration process will be meticulously managed to ensure that all components are seamlessly connected and fully operational. This involves configuring the system to provide continuous, high-quality video feeds from all camera locations, which can be accessed and monitored by trained law enforcement personnel at the command centre. The setup will also include redundant systems to prevent data loss and ensure uninterrupted monitoring in the event of equipment failure or power outages.

3.2 - TESTING AND COMMISSIONING

After the installation and integration of the CCTV systems, a thorough testing phase will be conducted. This will involve checking the functionality of each camera, ensuring that the poles are stable and that the video feeds are clear and uninterrupted. Any issues identified during this phase will be addressed promptly to ensure that the system is fully operational before it is commissioned for official use. The testing will also include a review of the monitoring capabilities, ensuring that the software and applications function as intended.

3.3 - MAINTENANCE AND SUPPORT

The project scope also includes provisions for the ongoing maintenance and support of the CCTV system. This will involve regular inspections of the cameras, cables and poles to ensure they remain in good working condition, as well as software updates and technical support as needed. The maintenance plan will be developed in consultation with Police Headquarters, Khatla, Aizawl, Mizoram to ensure that the surveillance system continues to function effectively over the long term.

The scope of work for this project is designed to ensure that all critical areas in Hnahthial Town are effectively monitored and secured through the installation of advanced CCTV surveillance systems. By carefully selecting the locations, installing the necessary infrastructure, and integrating the system with existing security measures, this project will significantly enhance the town's ability to deter and detect criminal activities, thereby improving overall public safety and security.

4. PROJECT IMPLEMENTATION TIMELINES

The project will be broken down into a number of distinct work packages. The work breakdown structure will be used as the basis for defining milestones. To deliver on time and within budget, the implementation will follow tried and tested PRINCE2 (Project in Controlled Environment) methodology. A breakdown of the work package is outlined below:

DELIVERABLES / MILESTONE	DURATION
Preparation phase • Order and purchase of necessary equipment	10 Days
System installation phase • Supply, Integration, Configuration and Installation of components	30 Days
Training & Provision phase • Training and Capacity building for the Police Personnel	5 Days
Preparation and Submission of the following • Project Completion Report • Operational Manuals • Maintenance Manuals • Handing Over	5 Days
TOTAL IMPLEMENTATION PERIOD - 50 DAYS	

5. OVERALL SOLUTION REQUIREMENT

5.1. Roll-Out/Go-Live

The configuration of all equipment shall be done in accordance with this tender and agreement thereof. The connectivity testing shall be part of the roll out plan.

5.2. Implementation Schedule

The installation and commissioning of the Networking Equipment at all locations shall be completed by the SI within a maximum of 50 days from receipt of work order. Likewise the Police Department will also ensure that the requisite numbers of personnel are made available for the Capacity Building program and subsequent manning of the surveillance system in Hnahthial Police Station.

5.3. Acceptance Testing

Acceptance Testing (AT) shall be conducted for all the equipment. SI shall provide test report from concerned officer in support of the technical and performance specifications.

After completion of the installation work, the complete system shall be tested for hardware and software functions.

SI, along with the representative nominated by the Mizoram Police, shall carry out the Acceptance Testing to prove the performance of the different equipment, subsystems and the overall installation, to the entire satisfaction of the Police Department.

The AT shall include a 3-day confidence trial of the equipment after completion of all tests. This period shall not be part of the installation period.

The SI (contractor) shall be responsible for supplying all the special tools and test instruments required for onsite testing.

As a part of the acceptance tests, it shall be checked that:

- Equipment AT shall be conducted for all the equipment.
- Network Acceptance shall be conducted in all locations where the surveillance systems are installed as per the UAT document.
- All documentation for routine Operation, Maintenance & Debugging.
- Preventive maintenance, installation drawing, factory and on-site acceptance test results are supplied / fully updated.

5.4. Taking Over

Even though the system might have started working much earlier, it would be taken over by the purchaser when:

- ❖ Acceptance Tests as per above have been completed to the full satisfaction of the Purchaser.
- ❖ Any deficiency pointed out during the AT shall be removed by means of software revision/upgrade at no additional cost to Mizoram Police before the system can be accepted.
- ❖ SI should successfully demonstrate the working of the system to the complete satisfaction of Mizoram Police/ staff nominated by Mizoram Police for carrying out Acceptance Testing when the system goes live.

5.5. Documentation

All the hard / soft copies of product documentation shall be handed over to the Mizoram Police for the proper upkeep of the equipment.

Documentation related to equipment configuration details, connectivity diagram, basic operation / maintenance / change control procedures shall also be provided to the Mizoram Police after the implementation and commissioning of the project.

5.6. Handover

The handover phase shall see the SI project team handover the live setup to Mizoram Police. Mizoram Police and Resident Engineers from SI shall be responsible for day to day administration and management of the network.

5.7. Goals of this Request for Proposal (RFP)

The primary goal of this tender is to solicit proposals from the reputed, reliable, researched and qualified firms to be selected as the System Integrator (SI) for Installation of CCTV at 3 strategic locations of Hnahthial town through a competitive bidding process for which the request for proposal (RFP) is issued. This RFP intends to bring out all the details with respect to the solution and other requirements that are deemed necessary to share with the potential bidders. The goals of RFP are further elaborated below:

- To seek proposals from potential bidders for providing the "bundle of services" in implementing and managing the CCTV at 3 strategic locations of Hnahthial town.
- To understand from the bidders how they propose to meet the technical and operational requirements of CCTV Surveillance Systems.
- To ascertain how potential bidders propose to deliver the services and sustain the demand and growth in the requirements.
- To ascertain from bidders on how they will ensure scalability and upgradeability of the infrastructure and solution proposed to be deployed.
- To understand from the bidders as to how they intend to innovate further on this service delivery model.

A Bid Evaluation Committee (BEC) shall be constituted for this project and it shall be the final authority with respect to qualifying a bidder through this RFP. Their decision with regard to the choice of the SI who qualifies through this RFP shall be final and the State Government reserves the right to reject any or all the bids without assigning any reason thereof.

6. SPECIAL CONDITIONS OF REQUEST FOR PROPOSAL:

The Bidder is required to give confirmation of their acceptance of Special Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Seller in the Contract) as selected by Mizoram Police, hereinafter referred to as Buyer. Failure to do so may result in rejection of Bid submitted by the Bidder.

6.1. **Performance Guarantee**: The Bidder will be required to furnish a Performance Guarantee by way of Bank Guarantee through a public sector bank or a private sector bank authorized to conduct government business (SBI, ICICI Bank Ltd., Axis Bank Ltd or HDFC Bank Ltd., etc.) for a sum equal to 2% of the contract value within 15 days of signing the contract with Police Department, Govt. of Mizoram. Performance Bank Guarantee should be valid up to 60 days beyond the commissioning and handing over the system.

6.2. **Option Clause**: The contract will have an Option Clause, wherein the Buyer can exercise an option to procure an additional 50% of the original contracted quantity in accordance with the same terms & conditions of the present contract. This will be applicable within the currency of contract. The Bidder is to confirm the acceptance of the same for inclusion in the contract. It will be entirely the discretion of the Buyer to exercise this option or not.

6.3. **Repeat Order Clause**: The contract will not have a Repeat Order Clause.

6.4. **Tolerance Clause:** To take care of any change in the requirement during the period starting from issue of RFP till placement of the contract, Buyer reserves the right to 20% plus/minus increase or decrease in the quantity of the required goods upto that limit without any change in the terms & conditions and prices quoted by the Seller. While awarding the contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

6.5 **Payment Terms -** It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through PFMS/RTGS/NEFT mechanism or payment through cheques, wherever feasible. The payment will be made as per the following terms, on production of the requisite documents:

The Payment Milestones are as under –

(a) Payment of 20% will be made as advance to the SI firm at the initial stage of the project immediately on signing of the contract.

(b) Payment of 20% will be made to the SI after submitting the proof of arrival of all equipment in Aizawl. A period of 15-25 days from signing of the contract will be provided to the SI for this.

(c) Payment of 30% will be made to the SI after completing 50% of the work. A period of 40 days will be provided to the SI from signing of the contract.

(d) Remaining 30% of the payment will be released to the SI after completing the work and after handover of live running system. For this a maximum period of

50 days will be provided to the SI. This release will however be linked to proper execution of Post Implementation Support Services.

(e) AMC Payment Terms : AMC will commence when a Warranty Period of 1 year is over and will be for a period of 2 years. The 1 year warranty period will start from the day the project Go-Live and officially handed over to the Police Department. The AMC payments to the SI will be made in 4 equal instalments on a six monthly basis as under :

(i) 1st Year – The 1st instalment will be released before the end of the 1st 6 months of the AMC Period. The 2nd instalment will be released before the end of the 2nd 6 months period.

(ii) 2nd Year – The 3rd instalment will be released before the end of the 3rd 6 months of the AMC Period. The 4th instalment will be released before the end of the 4th 6 months of the AMC Period.

The amount to be released shall be subject to the penalty imposed, if any, as per Para 9.5.

6.6. Taxes and other contingency - Prices quoted by the Bidder shall be final (inclusive of all taxes, duties, insurance, license fee, warranty, transportation, installation, commissioning and other costs). No variation in prices will be allowed under any circumstances during the entire process.

6.7. Two-Bid System.

- In two-bid system, all vendors should submit separate envelopes, one each for the technical bid and financial bid. Technical bid should be opened first and financial bid of only those bidders who are declared technically qualified will be opened. QCBS will be considered for evaluation (ranking). In this case, name of only vendors who have been declared technically qualified will come in the comparative statement.
- This tender will follow the three-cover two-bid system. The technical bid and financial bid should be placed in a separate sealed cover, and both the bids are to be placed together in the third outer cover, which should also be sealed.

7. SCOPE OF THE PROJECT: SUPPLY, INSTALLATION, TESTING, INTEGRATION & COMMISSIONING OF SYSTEM:

(1) CCTV Surveillance System in Hnahthial town which includes full provisioning of an IP/ANPR based Integrated Surveillance comprising of CCTV Surveillance System, associated networking equipment and network management system including detailed design, supply, installation, configuration, testing, commissioning, maintenance and provision throughout the Defect Liability.

(2) Seamless integration of IP Backbone with Smart Surveillance Application consisting of IP/ANPR Based Surveillance Cameras with Intelligent Monitoring and Recording Software.

(3) The scope includes Hand Holding Support for 12 months which includes manpower and transportation charges for qualified personnel for period of 12 Months after handing over of the project.

(4) The bidder should provide Training(s) on CCTV Surveillance, manning of Control Room, basic operations and troubleshooting techniques to nominated Mizoram Police personnel which includes training to junior level Police officers on-site upon completion of installation or as and when required, as the case may be.

(5) Setting up of Monitor in all identified locations for real time monitoring of Video feed.

(6) The project involves advanced software installation and integration of the same with the cameras.

(7) Backup Storage of the Video and Audio for at least 2 months from ANPR Cameras, Bullet Cameras and Dome Cameras equipped with Night Vision capabilities.

(8) All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system for long lasting utilization.

(9) All systems and components shall have been thoroughly tested and proven in actual use.

(10) All systems and components shall be covered by minimum 1-year manufacturer warranty duly extendable from the day installation is completed.

(11) The bidders shall quote separately the prices of supply and installation inclusive of Sales, Service or any other applicable taxes in the BOQ/BOM.

(12) The Police Hqrs., Govt. of Mizoram has carried out a detailed study and selected the following locations which must be essentially covered in this project. The BoQ accordingly has been prepared keeping these locations in mind. All the 3 locations for installation of the CCTV Surveillance System/ cameras are as under –

SYSTEM LOCATION & CAMERA DETAILS

Sl.No.	Location	Number of LPR / NPR Camera	Number of IP Camera	Number of IP Cam with Built-in-mic	Total
1	Northern entry and exit point near Jonathan-a Pa Filling Station	1	-	6	7
2	Northeast entry and exit point at Thingsai Peng	1	-	1	2
3	Southern entry and exit point near the Sericulture Farm	1	-	-	1
TOTAL		**3**	**-**	**7**	**10**

Summary :

Total Nos of locations	**3**
Total Nos of LPR cameras	**3**
Total Nos of IP cameras	**-**
Total Nos of IP cameras with built-in-mic	**7**
Total Nos of Recorder	**2**
Total Nos of Monitor	**2**

8. BIDDERS QUALIFICATION CRITERIA:

The bidder is required to meet the following criteria and submit documentary proof along with the offer:

(1) The bidder must submit copy of Goods & Services Tax Registration.

(2) The company whose equipment are to be used by the bidder firm must have a valid ISO 9001:2015 certificate for security services and related technology aspects.

(3) The bidder firm must have Authorized Distributor/Dealership/ Partnership Certificate from the company concerned.

(4) The bidder should submit the declaration that bidder has not been blacklisted by any Govt. agency within Mizoram and abroad during last 5 years. The bidder will also submit an undertaking that there is no legal case registered against the company by any Govt. agency during the last 5 years.

(5) Firm Profile along with bidder's turnover for one financial year (any year during the last three years) must be indicated (Audited balance

sheets are required). The turnover refers to a single firm and not the composite turnover of its subsidiaries/sister concern etc. for one year (if audited statement are not there, an interim statement must be provided).

(6) The bidder must submit the clause by clause compliance statement of the tender.

(7) The bidder should have completed at least 3 (three) similar single works involving a turnkey system integration project involving installation of a minimum of 50 CCTV cameras in each work. ***(Note: Please enclose copy of purchase order(s) with document proof).***

(8) The bidder should submit OEM certificate/authorization letter of the offered products. Also bidders have to provide certification from OEM that the items quoted by the tenderer are in production and would be serviceable for at-least 05 (five) years from the date of tender, no obsolete products should be quoted. Further, the bidder should submit declaration by the manufacturer on compliance with equipments specification in the RFP.

(9) The bidder should have full time trained engineer/technician to execute the job professionally on time. List of manpower giving the names, age, experience and qualification should be provided along with the tender response document.

(10) The bidder should submit 3 (three) Satisfaction of Customer letter for outdoor surveillance done by the registered firm.

(11) The bidder firm must set up within 3 months after award of contract, a service team headed by a qualified engineer/technician with service vehicle at Aizawl and Lunglei to be called for after sales service in Mizoram after completing the work.

(12) The bidder firm must provide a letter of confirmation mentioning the materials to be used with full specs/model which will be supplied to the bidder firm by the company.

Note : The bidder must enclose the above supporting documents along with the Evaluation Format (See page no.30 & 31) in the outermost (third) envelope.

9. SERVICE LEVEL AGREEMENT (SLA):

(A) PURPOSE OF SERVICE LEVELS:

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to define the levels of service which shall be provided by the selected bidder to Police Department, Mizoram for the duration of this contract.

The benefits of the SLA are as follows –

- Solution performance optimization and obtaining desired results efficiently.
- Standards and operational guidelines for Police Department, Mizoram staff and Bidders.
- Greater productivity and better use of skills and experience.
- Faster redressal of defects in the system.

(B) DEFINITIONS:

For better understanding of Bidders, following terminologies are defined below:

- "Availability" shall mean the time for which the services and facilities are available for conducting operations from the equipment hosted at the sites/location, Control room.
- "Downtime" is the time the services and facilities are not available and excludes the scheduled outages planned in advance for different solution components and the link failures that are not control room operator's responsibility.
- "Helpdesk Support" shall mean the 24x7 centre which shall handle fault reporting.
- "Trouble Ticketing" and related enquiries during the Warranty and contract period.
- "Incident" refers to any event/abnormalities in the functioning of the CCTV, Control room and equipment/Services that may lead to disruption in normal operations of overall solution.
- "Service Window" shall mean the duration for which the facilities and services shall be available. Service window in this case shall be 24x7.

9.1. SLA between the Client and Bidder:

The SLA specifies the expected levels of service to be provided by the SI on 24x7 basis to the various stakeholders and users of the project. This expected level is also called the Baseline. SLA also specifies the limits and metrics for lower performance, which will be entailing a lower payment to the Bidder. It would also specify similar criteria for higher performance. The SLA also specifies the penalties for breach of the SLA metrics.

9.2. SLA Tracking and Penalty

This SLA document provides for minimum level of services required as per contractual obligations based on performance indicators and measurements thereof. The Bidder shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels. The services provided by the Bidder shall be reviewed by the Police Department, Mizoram.

- Regularly check performance of the Bidder against this SLA.
- Discuss escalated problems, new issues and matters still outstanding for resolution.
- Review of statistics related to rectification of outstanding faults and agreed changes.
- Obtain suggestions for changes to improve the service levels.

9.3. SLA Compliance and Monitoring:

At Hnahthial Police Station, an Officer-in-Charge will keep a System Maintenance Log Book which is a record of failure of the system including the nature of failure, date and time of booking the complaint, when the machine was put back in to service and total down time. This record will be signed by the SI Service Engineer/Technician and OC concerned once the incidence is resolved. Standard format for the System Maintenance Log Book shall be designed and prepared and supplied to all OC by the SI free of cost.

9.4. Performance Monitoring

A signed copy of *Monitoring Report* prepared from the record of the System Maintenance Log Book of all locations shall be forwarded by the SI to Police Headquarters, Mizoram on quarterly basis (every three months) in support to compliance regulation.

Monitoring Report should contain the following details:

a. Availability of hardware and solution components.
b. Total number of events of interest recorded at the locations and action taken.
c. Report on planned activities like power backups, hardware up-gradation, etc.
d. Maintenance schedule for the quarter.

9.5. Penalty:

In case of delay or failure to address the incidence(s) beyond the time limits, penalties shall be imposed upon the SI by the Police Department as mentioned below. The penalty amount shall be deducted from the AMC before it is released to the SI. Details of deduction, if any, shall be communicated to the SI.

1. Break-down calls should be attended promptly and in any case on the same day in the same station. Calls from same station after office hours shall be attended to before 12:00 noon of the next day. In case of call of break-down from out-station, the same should be attended within 24 hours excluding journey time. Calls from out-station and after office hours shall be attended to within 36 hours from the time of call. In case of an urgent requirement the fault should be attended on non-working day also.

2. Penalty of Rs.1,000/- per occasion will be imposed if call or request for any service or complaint report is not attended to as per Para 1 of 9.5 above and if the SI fails to pick up or respond to the call for 24 hours on any working day (complaint can be addressed onsite or offsite through help desk).

3. In case of failure to make the system to normal functions, the time required for restoring the system to normal will be intimated to the OC concerned by the SI at the time of attending to the complaint as at Para 1 of 9.5 above. Ordinarily, such required time shall not be more than 03 (three) days from the date of receiving or attending to the break-down call. Penalty will be imposed @ Rs.500/- per day per location w.e.f. the fourth day till the time the system is restored to normal.

4. The SI will keep Police Department, Mizoram informed of the updated contact details (landline no., mobile no. and email ID) of the persons to whom service request required to be forwarded.

9.6. Penalty Exclusion

SLA penalty during operation and maintenance phase will not be applicable to SI under following conditions:

- Failure or malfunctioning of the equipment, systems not supplied/owned/ controlled by the SI.
- Circumstances or instances of Force Majeure; or
- Scheduled or preventive maintenance.

9.7. Implementation Phase SLA

CAPACITY BUILDING :

The bidder shall provide Training(s) on CCTV Surveillance, manning of Control Room, basic operations and troubleshooting techniques to nominated Mizoram Police personnel which includes training to junior level Police officers on-site upon completion of installation or as and when required, as the case may be. The below table give details on the Service Level the SI should maintain on capacity building :

Service Level Description	Measurement
Capacity Building	The training time should be a minimum of 3 hours. At least 90% of the trainees within the training program should give a rating of satisfactory or above. This service level training will be monitored and measured through feedback survey to be provided to each attendee within the program. If the training quality in the program in each location falls below the rating stated above, it will be treated as one (1) violation for which Rs. 1000/- per violation will be levied to the SI.

9.8. Post Implementation Support Services

As part of the post implementation services, the SI shall provide support for the software, hardware, and other infrastructure provided as part of this RFP. SI shall provide three types of post-implementation support services, namely :

1. Free Handholding Services (12 months, free of cost, from the day the project goes live and handed over)
    - Operations and maintenance services for the systems and related infrastructure supplied and commissioned by the SI.
    - Helpdesk for attending call related to faults.
    - Software maintenance and support services.
    - Application functional support services.
    - It goes concurrently with the warranty period.

2. Warranty support for 12 months after go-live and before AMC period.
    - SI shall provide a comprehensive warranty and on-site free service warranty for 1 year from the date of Go Live and handed over to Police Department. It goes concurrently with Free Handholding Support.
    - SI shall provide the comprehensive manufacturer's warranty in respect of proper design, quality and workmanship of all hardware, equipment, accessories, etc. covered by the RFP. SI must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this RFP against any manufacturing defects during the warranty period.
    - SI shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels in the RFP.
    - SI is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the RFP. During the warranty period SI shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost to the state in case the procured hardware or software is not adequate to meet the service levels.
    - During the warranty period SI shall maintain the systems and repair/replace at the installed site, at no charge to state, all defective components that are brought to the SI's notice.
    - The SI shall as far as possible, repair the equipment at site.
    - In case any hard disk drive of any server, NAS, or client machine is replaced during warranty / AMC the unserviceable HDD will be property of state and will not be returned to SI.
    - SI shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions.
    - The SI shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.
    - SI shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met.
    - Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).

3. Annual Maintenance Contract (AMC) for 2 years from the date that warranty is over (AMC Charges % will be quoted by the bidder and will form part of the financial bid for this RFP response). AMC will be a part of the Work Order, the payment terms have already been indicated at 6.5. (e).

   As part of the AMC services, SI shall provide:

   - SI shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements and maintenance.
   - If the Operating System or additional copies of Operating System are required to be installed/reinstalled/de-installed, the same should be done as part of AMC.
   - SI should carry out any requisite adjustments/changes in the configuration for implementing different versions of Application Software.
   - SI shall provide patches to the licensed software including the software, operating system, databases and other applications.
   - Software License Management. The SI shall provide for software license management and control. SI shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements, and maintenance.
   - SI shall provide complete manufacturer's technical support for all the licensed software problems and/or questions, technical guidance, defect and non-defect related issues. SI shall provide a single-point-of-contact for software support and provide licensed software support including but not limited to problem tracking, problem source identification, problem impact (severity) determination, bypass and recovery support, problem resolution, and management reporting.

10. QUALIFICATION EVALUATION FORMAT

Relevant/Supporting Documents to be submitted by Bidder in accordance with "Evaluation of Qualification for the Bids:"

Sl. No.	Parameters	Supporting Documents Required	Endorsed
1	Receipt of EMD	Receipt	
2	The equipment used by the bidder firm must have a valid ISO 9001:2015 certificate for security services and related technology aspects.	ISO Certificate Copy	
3	The bidder firm must have Authorized Distributor/Dealership/Partnership certificate from the company.	Certificates	

4	The bidder should submit the declaration that bidder has not been blacklisted by any Govt. agency within Mizoram and abroad during last 5 years. The bidder will also submit an undertaking that there is no legal case registered against the company by any Govt. agency during the last 5 years.	Declaration / Undertaking	
5	Firm Profile along with bidder's turnover for any one financial year during the last three years must be indicated (Audited balance sheet is required). The turnover refers to a single firm and not the composite turnover of its subsidiaries/sister concern etc. for one year (if audited results are not there, an interim statement must be provided)	Financial Statements	
6	The bidder must submit the clause by clause compliance statement of the tender.	Compliance Statement	
7	The bidder should have completed at least 3 (three) similar single works involving a turnkey system integration project involving installation of a minimum of 50 CCTV cameras in each work.	Purchase/Work Order	
8	A) The bidder should submit OEM certificate/authorization letter of the offered products. Also bidders have to provide certification from OEM that the items quoted by the bidder firm are in production and would be serviceable for at-least 05 (five) years from the date of tender, no obsolete products should be quoted. B) The bidder should submit declaration by the manufacturer on compliance with specification of equipment in the RFP.	Certificates	
9	The bidder should have full time Trained Engineer to execute the job professionally on time. List of manpower giving the names, age, experience and qualification should be provided along with the tender response document.	Details of personnel	
10	The bidder should submit 03 (three) Satisfaction of Customer letter for outdoor surveillance done by the registered firm.	Certificates	
11	The bidder firm must set up within 3 months after award of contract, a service team with service vehicle at Aizawl and Lunglei to be called for after sales service after completing the work.	Details	
12	The bidder firm must provide a letter of confirmation mentioning the materials to be used with full specs/model which will be supplied to the bidder firm by the company.	Details	

Note : Only those bidders who have fulfilled the above 12 criteria satisfactorily will be declared qualified.

11. TECHNICAL BID FORMAT

The technical specifications of models/products for meeting the desired functional requirement are listed bellow –

11.1. IP CAMERA WITH BUILT-IN-MIC

Description	Minimum Specifications	Offered Specifications	Make/Model
Image Sensor	1/2.8" Progressive Scan ultra-low illumination CMOS GC4653		
Min. Illumination	Color: 0.1Lux@F1.2; B&W:0Lux@F1.2 (IR on)		
Shutter Speed	1/3 s to 1/100,000 s		
Slow Shutter	Yes		
Wide Dynamic Range	DWDR (off/ low/ medium/high)		
Lens Type	Fixed focal lens, 2.8, 4, and 6 mm optional		
Iris Type	Fixed		
Depth of Focus	2.8mm, 2.5 m to ∞ 4 mm, 3.5 m to ∞ 6 mm, 7.5 m to ∞		
Aperture	F1.0		
Lens Mount	M16		
Supplement Light Type	White Light		
White Light Range	40 m		
Smart Supplement Light	Yes		
Max. Resolution	2688 × 1520		
Main Stream	50 Hz: 25 fps (2688 × 1520, 1920 × 1080,1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080,1280 × 720)		
Sub Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640× 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640× 360)		
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 ×720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 ×720, 640 × 480, 640 × 360)		
Video Compression	Main stream: H.265/H.264/H.265+/H.264+ Sub-stream:H.265/H.264/MJPEG Third stream: H.265/H.264		
Video Bit Rate	Fixed bit rate, variable bit rate (1280kbps-4Mbps)		
H.264 Type	Baseline Profile/Main Profile/High Profile		
H.265 Type	Main Profile		

H.264+	Main stream supports		
H.265+	Main stream supports		
Bit Rate Control	CBR/VBR		
Scalable Video Coding (SVC)	H.264 and H.265 encoding		
Environment Noise Filtering	Yes		
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz		
Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/ MP2L2/PCM/MP3/AAC-LC		
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)		
Simultaneous Live View	Up to 6 channels		
API	Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK		
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, ARP,WebSocket, WebSockets		
User/Host	Up to 32 users. 3 user levels: administrator, operator and user		
Security	Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2, WSSE and digest authentication for Open Network Video Interface		
SNR	≥ 52 dB		
Day/Night Switch	Auto, Schedule		
Image Enhancement	BLC, HLC, 3D DNR		
Image Parameters Switch	Yes		
Built-in Microphone	Yes		
Hardware Reset	Yes		
Communication Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port		
Basic Event	Motion detection (human and vehicle targets classification), video tampering alarm, exception		

11.2. AUTOMATIC NUMBER PLATE RECOGNITION (ANPR) CAMERA

Description	Minimum Specifications	Offered Specifications	Make/Model
Image Sensor	1/1.8" progressive scan CMOS		
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), 0.0005 Lux with IR		
Shutter Speed	1/50 s to 1/100,000 s		
Slow Shutter	Yes		
Day & Night	IR Cut Filter		
Digital Noise Reduction	3D DNR		
WDR	120 dB		
Focal Length	8-32 mm		
Aperture	F1.6-1.65		
Focus	Auto		
Auto-iris	DC drive		
FOV	Horizontal FOV: 39.7° to 15.9°; Vertical FOV: 22.3° to 9.1°; Diagonal FOV: 45.8° to 18.1°		
IR Range	Up to 100 m		
Wavelength	850 nm		
Video Compression	Main stream: H.265/H.264/MJPEG Sub-stream: H.265/H.264/MJPEG		
H.264 Type	Baseline profile/Main profile/High profile		
H.265 Type	Baseline profile/Main profile/High profile		
Video Bit Rate	32 Kbps to 16 Mbps		
Audio Compression	G.711/G.722.1		
Audio Bit Rate	8 Kbps (G.711) /16 Kbps (G.722.1)		
Recognition	License plate recognition		
Smart Function	Vehicle type classification, color identification, no-plate vehicle capture, vehicle driving direction detection		
No License Plate Detection	Supported		
Motorcycle LPR	Supported		
Vehicle Type	Car/Van/Bus/Truck/Others		
Capture Speed Range	5 to 120 km/h		
Max. Resolution	1920 × 1080		
Main Stream	50 Hz: 50 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 60 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)		
Sub-Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)		
Third Stream	50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)		
Image Enhancement	BLC, HLC, 3D DNR		

Image Settings	Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser.		
Video Compression	H.264 and H.265 encoding		
Day/Night Switch	Auto/Scheduled/Triggered by alarm in		
Picture Overlay	Logo picture can be overlaid on video with 128 × 128 in 24-bit bmp format		
S/N Ratio	⩾ 52 dB		
Network Storage	microSD/TF card (128 GB), local storage and CVR, NVR, ANR		
Alarm Trigger	HDD Error, network disconnected, IP address conflicted, vehicle detector exception, traffic light detector exception		
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP		
Security Measures	Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest authentication for ONVIF (Version 2.1)		
General Function	One-key reset, three streams, heartbeat, password protection, watermark		
Simultaneous Live View	Up to 20 channels		
User/Host	Up to 32 users, 3 user levels: administrator, operator, and user		
Audio	Yes		
Communication Interface	1 RJ45 10M/100M/1000M Ethernet interface 2 RS-485 interfaces 1 RS-232 port		
Alarm	2 input interfaces, 2 output interfaces		
Video Output	Network		
On-Board Storage	Built-in microSD/TF card, up to 128 GB		
Reset Button	Yes		
Operating Conditions	Temperature: -30 °C to +70 °C (-22 °F to +158 °F) , Humidity: 95% or less (non-condensing)		
Power Supply	12 VDC to 24 VDC ± 20%		
Protection Level	IP67, IK10		

11.3. 8 CHANNEL NETWORK VIDEO RECORDER (NVR)

Description	Minimum Specifications	Offered Specifications	Make/Model
AI by Device	Facial recognition, perimeter protection, motion detection 2.0		
AI by Camera	Facial recognition, perimeter protection, throwing objects from building, motion detection2.0, ANPR, VCA		
Facial Detection and Analytics	Face picture comparison, human face capture, face picture search		
Face Picture Library	Up to 16 face picture libraries, with up to 20,000 face pictures in total (each picture ≤ 4 MB, total capacity ≤ 1 GB)		
Facial Detection and Analytics Performance	1-ch, 8 MP		
Face Picture Comparison	4-ch		
Motion Detection by device	All channels, 4 MP (when enhanced SVC mode is enabled, up to 8 MP) video analysis for human and vehicle recognition to reduce false alarm		
Motion Detection by camera	All channels		
Perimeter protection by device	1-ch, 4 MP (HD network camera, H.264/H.265) video analysis for human and vehicle recognition to reduce false alarm		
Perimeter protection by camera	All channels		
IP Video Input	8-ch		
Incoming Bandwidth	80 Mbps		
Outgoing Bandwidth	80 Mbps		
HDMI Output	1-ch, 4K (3840 × 2160)/30 Hz, 2K (2560 × 1440)/60 Hz, 1920 × 1080/60 Hz, 1600 × 1200/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz		
VGA Output	1-ch, 1920 × 1080/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz		
Video Output Mode	HDMI/VGA independent output		
CVBS Output	N/A		
Audio Output	1-ch, RCA (Linear, 1 KΩ)		
Two-Way Audio	1-ch, RCA (2.0 Vp-p, 1 KΩ, using the audio input)		
Decoding Format	H.265/H.265+/H.264+/H.264		
Recording Resolution	12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2 CIF/CIF/QCIF		
Synchronous Playback	8-ch		
Stream Type	Video, Video & Audio		
Audio Compression	G.711ulaw/G.711alaw/G.722/G.726/AAC		
Remote Connection	128		
API	ONVIF (profile S/G); SDK; ISAPI		
Compatible Browser	IE11, Chrome V57, Firefox V52, Safari V12, Edge V89, or above version		
Network Protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS		

Network Interface	1 RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface		
SATA	1 SATA interface		
Capacity	Up to 10 TB capacity for each HDD		
USB Interface	Front panel: 1 × USB 2.0; Rear panel: 1 × USB 2.0		
Power Supply	12 VDC, 1.5 A		
Consumption	≤ 10 W (without HDD)		
Working Temperature	-10 °C to 55 °C (14 °F to 131 °F)		
Working Humidity	10% to 90%		

11.4. 4 PORT POWER OVER ETHERNET (PoE)

Description	Minimum Specifications	Offered Specifications	Make/Model
Ports	4 × Gigabit PoE port,1 × Gigabit RJ45 port		
MAC Address Table	2 K		
Switching Capacity	10 Gbps		
Packet Forwarding Rate	7.44 Mpps		
Internal Cache	1 Mbits		
PoE Standard	IEEE 802.3af;IEEE 802.3at		
PoE Power Pin	End-span: 1/2(+), 3/6(-)		
PoE Port	PoE: Ports 1 to 4		
Max. Port Power	30 W		
PoE Power Budget	35 W		
Shell	Metal material		
Operating Temperature	–10 °C to 55 °C (14 °F to 131 °F)		
Storage Temperature	–40 °C to 85 °C (–40 °F to 185 °F)		
Operating Humidity	5% to 95% (no condensation)		
Relative Humidity	5% to 95% (no condensation)		
Power Supply	48 V DC, 0.8 A		
Max. Power Consumption	38 W		
Power Consumption in Idle	3 W		
Installation Mode	Desk-Mounted,Wall-Mounted		
Surge Protection	6 kV		

11.5. 8 PORT POWER OVER ETHERNET (PoE)

Description	Minimum Specifications	Offered Specifications	Make/Model
LED light	Power, System (Per Device); Link/Activity (Per Port)		
PoE Ports	8 x 10/100/1000Mbps ports 2 x 1000Mbps SFP ports 1 x Console port		
PoE Standard	IEEE 802.3i, IEEE 802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3az, IEEE802.3af, IEEE802.3at		
Packet Forwarding Rate	41.67Mpps		
MAC Address List	8K		

Power Source	100~240VAC,50/60HZ, 120W Power Consumption		
Working Temp	-20°C to 55°C		
Humidity	10%~90% (Non-condensing)		
Dimension	230mm(W) x 150mm(D) x 44.5mm(H)		

11.6. MEDIA CONVERTER

Description	Minimum Specifications	Offered Specifications	Make/Model
Standard	• Complies with IEEE 802.3 10BASE-T • Complies with IEEE 802.3u 100BASE-TX/100BASE-FX • Complies with IEEE 802.3ab 1000BASE-T • Complies with IEEE 802.3z 1000BASE-SX/LX • IEEE 802.3x full-duplex flow-control, back-pressure in half-duplex eliminate packets loss		
Interface	• Dual 100BASE-FX/1000BASE-SX/LX SFP fiber-optic slots • One 10/100/1000BASE-T Copper, auto MDI/MDIX function • Auto-negotiation for 10/100/1000BASE-T; half-duplex or full-duplex for 10Mbps and 100Mbps, full -duplex for 1000Mbps		
Redundancy	• Link status auto-detecting and redundant on dual ports with the same connector type • Allows only the Primary-Port or the Backup-Port to activate at a time • When the Primary-Port link fails occurs, the traffic swaps to Backup-Port automatically • Once the Primary-Port link regains, the traffic swaps from the Backup-Port to the Primary-Port		
Mechanical	• External 5V/2.5A DC power supply • LED indicators for easy network diagnose • DIP switch for 100FX or 1000X SFP module supports on dual SFP slots • DIP switch for 3-port operation in Gigabit switch mode or redundant mode • Compact in size, easy installation • Co-works with PLANET 10”/19” Media Converter Chassis (MC-700/MC-1500/Mc-1500R/MC-1500R48) • Wall mounting and DIN-rail installation supported		

11.7. 8TB SURVEILLANCE HARD DISK DRIVE

Description	Minimum Specifications	Offered Specifications	Make/ Model
Formatted capacity	8 TB		
Form factor	3.5-inch		
Advanced Format(AF)	Yes		
RoHS compliant[6]	Yes		
Cameras supported	Upto 64		
Drive Bays Supported	8+		
Firmware Feature Name	AllFrame4K		
Tarnish resistant components	Yes		
Interface transfer rate (max)	6 Gb/s		
Cache(MB)	256		
Performance Class	5400 RPM		
Load/unload cycles	300,000		
Annualized workload rating	180 TB/yr		
MTBF	1,000,000		
Limited warranty(years)	3		
Average power requirements (W)	0.4 to 5.1W		
Operating temperature	0 to 65 °C		

11.8. MONITOR

Description	Minimum Specifications	Offered Specifications	Make/ Model
Display size	61.0cm (27 in) diagonal		
Display type	IPS with LED backlight, anti-glare		
Panel active area	52.7 x 33.6 cm (20.7 x 11.7 in)		
Brightness	300 nits		
Color gamut	72%		
Color support	Up to 16.7 million colors with the use of FRC technology		
Pixel pitch	0.2745 x 0.2745 mm 93 PPI		
Inputs	1 VGA, 1 HDMI		
Viewing angle	Horizontal viewing angle: 178 degrees Vertical viewing angle: 178 degrees		
Scan range	Horizontal: 30-86 kHz Vertical: 48-75 Hz		
Recommended resolution (H x V)	1920 x 1080 at 60 Hz (FHD)		

Aspect ratio	16:9 1000:1		
Static contrast ratio	Up to		
Dynamic contrast ratio	Up to 10,000,000:1		
Response time	5 ms gray-to-gray (GtG) Typical: 14 ms GtG Maximum: 28 ms GtG		
Power consumption	22 Watts maximum		
Tilt	-5 to +25 degrees		
Power supply	External		
Dimensions	W x D x H (unpacked): 54.1 x 18.0 x 40.9 cm (21.3 x 7.1 x 16.1 in)		
Weight	Unpacked: 2.8 Kg (6.26 lbs)		

11.9. UNINTERRUPTIBLE POWER SUPPLY (UPS)

Description	Minimum Specifications	Offered Specifications	Make/ Model
Control Type	MOSFET based PWM		
Voltage	12 V		
Maximum VOC	50 V DC		
Operating Frequency Range	46 Hz - 54 Hz		
Output Voltage	220 V AC Nominal		
Operating Voltage Range	70 V AC - 290 V AC		
Maximum Bulb Load	660 W		
Output Waveform	Pure sine wave with < 2 % VTHD		
Frequency	50 Hz +/- 0.5 Hz		
Transfer Time	Mains to Inverter < 20 ms & Inverter to Mains < 15 ms		
Operating Temperature	-10°C - + 50°C		
Relative Humidity	0-95 % RH non-condensing		
Audible Noise	< 55 dB		
Battery Capacity	150Ah		

Battery Type	Tubular		
Battery Voltage	12V		

11.10. SINGLE MODE OPTIC FIBRE

Description	Minimum Specifications	Offered Specifications	Make/ Model
Shape	Round		
Net Quantity	1.0 count		
Connectivity Technology	Fiber optic		
Indoor/Outdoor Usage	Outdoor, Indoor		
Outer Material	Other		
UPC	812472019639		
Model	6432671		
Product Dimensions	28.19 x 23.11 x 20.57 cm; 2.72 kg		
Item model number	6432671		
Special Features	Durable		
Batteries Included	No		
Batteries Required	No		
Item Weight	2 kg 720 g		

11.11. CAT6 UTP ARMOURED CABLE

Description	Minimum Specifications	Offered Specifications	Make/ Model
Conductor	Solid Bare Electrolytic Grade Copper		
Insulation	Polyethylene (HDPE)		
Nominal Conductor Diameter	23 AWG (0.558 ± 0.015mm)		
Cross Filler	HDPE		
Pairing	Twisted into Two core		
Outer Sheath	PVC		
Operating Temperature	-20 to +50°C		
Storage Temperature	-20 to +75°C		
Approximate OD	9.30 ±0.55 mm		

Impedance	100±15% Ω		
Resistance Unbalance	5% Max		
Sequential	At Every Meter		
Packing	305 Mtrs		

The evaluation of technical score is given below :

The weight given to the Technical (T) and Financial (P) proposal are : T:P = 70% : 30%

12. Evaluation Criteria / Sub-Criteria and Marking System

Sl.No.	Criteria	Level	Score	Max Score	Bidder's Score
1	Availability of Office in Mizoram (at Aizawl)	Can produce proof of office within 3 months from award of contract	2	5	
		Available	5		
2	Technical Team size	<10 persons	0	5	
		10 to 20 persons	3		
		>20 persons	5		
3	Average annual Turnover in last 3 yrs i.e. Financial Year 2021-22, 2022-23,2023-24	50 - 100 lakhs	2	5	
		100 – 150 lakhs	3		
		150 – 200 lakhs	5		
4	Certificate/authorization letter of the offered products from the Manufacturer		5	5	
5	Experience of CCTV Project under Govt. of Mizoram along with Supply order	50 - 100 lakhs	2	5	
		100 – 200 lakhs	3		
		200 – 250 lakhs	5		
6	Experience of CCTV Project under Central Govt / Society/ Institution	20 – 30 lakhs	2	5	
		30 - 50 lakhs	3		
		50 – 100 lakhs	5		
7	Turnkey basis successful project experience with Mizoram Police involving installation of minimum of 50 CCTV cameras in each work with supply/work order		10	10	
8	Evaluation of equipment/compliance			60	
	(a) IP Camera with Built-in-Mic		8		
	(b) ANPR Camera		10		
	(c) Monitor		6		
	(d) 8 Channel NVR		6		

	(e) 4 Port PoE		4		
	(f) 8 Port PoE		6		
	(g) Media Convertor		8		
	(h) 8 TB HDD		4		
	(i) UPS		8		
	TOTAL			**100**	

Note : The method of selection that shall apply for selecting a System Integrator from those who submit their proposal is Quality and Cost Based Selection (QCBS). The total score is calculated by weighing the technical and financial scores and adding them as per the formula and instructions specified below :

Bn=0.70*Tn + 0.30 *(Cmin/Cb)100

Where Bn=overall score of bidder under consideration.

Tn = Technical score of the bidder under consideration.
Cb = Actual price quoted by the bidder.
Cmin = Lowest price amongst the financial bids.

13. PRICE BID FORMAT:

The Price Bid Format is attached below with this RFP and bidders are required to fill this up correctly with full details.

DESCRIPTION	QUANTITY	UNIT	UNIT RATE WITH TAXES	AMOUNT WITH TAXES
CCTV EQUIPMENT				
IP Camera with Built-In-Mic	7	Nos		
ANPR Camera	3	Nos		
8 Channel NVR	2	Nos		
27 " Monitor	2	Nos		
4 Port PoE	6	Nos		
8 Port PoE	4	Nos		
Media Convertor	10	Nos		
8TB HDD	2	Nos		
POWER BACKUP				
Uninterruptible Power Supply	2	Nos		
ACCESSORIES				
Galvanised Iron Pole	34	Nos.		
Single Mode Optic Fibre	7500	Mtrs.		
Camera Housing IP67	10	Nos.		
CAT6	300	Mtrs.		
4MM PVC Wire	500	Mtrs.		
CCTV Junction Box	4	Nos.		
4U NVR Rack	2	Nos.		
RJ 47 connector	50	Nos.		
Surge Protector	6	Nos.		
Electrical Conduit	5	Nos.		
INSTALLATION & COMMISSIONING CHARGES				
Supply, Installation, Integration, Project Management Charges				
AMC CHARGES				
AMC Charges for 24 Months				
TOTAL (Supply + Installation + Service)				

Note: *The detailed pricing for each component will be filled in by the bidders in the Bill of Quantity mentioned in the RFP which will be attached along with the price bid.*

13. BANK GUARANTEE PROFORMA

Whereas…….. (hereinafter called the "tenderer") has submitted their offer dated…….. for the supply of …… (hereinafter called the "tender") against the purchaser's tender enquiry No. …… KNOW ALL MEN by these presents that WE…….. of …… having our registered office at ……..are bound unto…….. (hereinafter called the "Purchaser) in the sum of…….. for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this……day of……2024.

THE CONDITIONS OF THIS OBLIGATION ARE:

(1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

(2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity –

  (a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.

  (b) Fails or refuses to accept/ execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

When communication is received from or on behalf of Mizoram Police to invoke this Bank Guarantee, the amount will be remitted to in favour of **Office of Director General of Police , Police Headquarters, Khatla, Aizawl**.

(Signature of the authorized officer of the Bank)
……
Name and designation of the officer
……
Seal, name & address of the Bank and address of the Branch

14. BILL OF MATERIAL

Approved Price Bid of the successful bidder as indicated in Para 12 will form the detailed Bill of Material.