



SHRI AMARNATH JI SHRINE BOARD

TENDER DOCUMENT FOR

“Design, Installation, Commissioning and Operationalizing on BOT (Build, Operate, and Transfer) model”: -

- i. A computerized online prepaid system with required number of counters for the pilgrims utilizing pony/Pithu/Palki services visiting Shri Amarnathji Shrine.**
- ii. UHF Tagging of Pilgrims Visiting Shri Amarnathji Shrine for tracking**
- iii. UHF Tagging of Various Service providers.**
- iv. Setting up of e-surveillance and RFID tracking.**
- v. Robust MIS system for monitoring of the project.**
- vi. Installation and Commissioning of UHF RFID tracking of vehicles moving to Shri Amarnath yatra base camps as per the security agencies.**

Due on: 5th April, 2022

NIT NO: SASB/RFID/NIT/16

DATED: 19th March 2022



SHRI AMARNATH JI SHRINE BOARD

ABRIDGED TENDER NOTICE

For and on behalf of the Chairman, Shri Amarnathji Shrine Board, J&K, sealed tenders on the prescribed format affixed with Revenue Stamps worth Rs. 6/- are invited from reputed professional firms/companies dealing in RFID Tracking and running of computerized online prepaid system for: -

“Design, Installation, Commissioning and Operationalizing on BOT (Build, Operate, and Transfer) model”: -

- i. A computerized online prepaid system with required number of counters for the pilgrims utilizing pony/Pithu/Palki services visiting Shri Amarnathji Shrine.
- ii. UHF Tagging of Pilgrims Visiting Shri Amarnathji Shrine for tracking
- iii. UHF Tagging of Various Service providers.
- iv. Setting up of e-surveillance and RFID tracking.
- v. Robust MIS system for monitoring of the project.
- vi. Installation and Commissioning of UHF RFID tracking of vehicles moving to Shri Amarnath yatra base camps as per the security agencies.

Further details can be downloaded from our website www.shriamarnathjishrine.com. The duly sealed offer/tender addressed to the Chief Executive Officer, Shri Amarnathji Shrine Board must reach this office at/on or before **5th April, 2022 up to 2 PM IST**.

Addl. Chief Executive Officer
Shri Amarnathji Shrine Board

No: SASB/RFID/NIT/16

Dated: 19th March, 2022

Shri Amarnath Ji Shrine Board

NOTICE INVITING TENDER

For and on behalf of the Chairman, Shri Amarnath Ji Shrine Board, (J&K) sealed tenders are invited in two-Bid format affixed with revenue stamp worth Rs. 6.00 (Rupees Six only) invited from reputed professional firms/companies dealing in RFID Tracking and running of computerized online prepaid system for "Design, Installation, Commissioning and Operationalizing on BOT (Build, Operate, and Transfer) model" i. A computerized online prepaid system with required number of counters for the pilgrims utilizing pony/Pithu/Palki services visiting Shri Amarnathji Shrine. ii. UHF Tagging of Pilgrims Visiting Shri Amarnathji Shrine for tracking, iii. UHF Tagging of Various Service providers, iv. Setting up of e-surveillance and RFID tracking, v. Robust MIS system for monitoring of the project., vi. Installation and Commissioning of UHF RFID tracking of vehicles moving to Shri Amarnath yatra base camps as per the security agencies." as per the terms and conditions mentioned in the Annexures appended herewith which must be accompanied with Earnest Money in the form of CDR/FDR of the amount mentioned below pledged to the Chief Accounts Officer, SASB from the concerned suppliers F.O.R. at site as under: -

S. No	Description of work	EMD
1.	RFID Tracking of Vehicles, Yatris, Service Providers and running of computerized online prepaid counters for the pilgrims utilizing Pony/Pithu/Palki services visiting Shri Amarnath Ji Shrine Board.	Rs. 5,00,000.00/-

The tenders complete in all respects must reach the office of the Addl. Chief Executive Officer, SASB, Chaitanya Ashram, Talab Tillo Jammu-180002 on or before 5th April, 2022 up to 02:00 P.M. IST. The Technical Bids shall be opened on the same day at 3:00 P.M. or any other subsequent day decided by the tender evaluation committee. Pre-bid meeting shall be held on 25th March, 2022 at 11 AM in the SASB Office. The Bid shall be opened in presence of such Bidders who may choose to be present for the same. The date of opening of financial Bids shall be intimated only to be shortlisted Bidders after evaluation of Technical Bids. Shrine Board's official website www.shriamarnathjishrine.com.

The tender documents containing detailed terms and conditions can be purchased from the Office of the Shrine Board against a cash payment of Rs. 1180/- including GST @ 18% on Rs 1,000/- (Non-transferable and non- refundable) on any working day and the same can also be downloaded from our website www.shriamarnathjishrine.com. Cost of Tender documents of Rs. 1180/- including GST @ 18% on Rs 1,000/- in the shape of Demand Draft in favour of Shri Amarnathji Shrine Board, (J&K) must accompany with the downloaded Tender Form. Tenders complete in all respects must be sent to the undersigned through speed post/ Register of acknowledgement of delivery (A.D) /reputed courier service or be dropped in the sealed Tender Box available in Central Office, SASB at by or before 5th April, 2022 up to 2 :00 P.M. IST. The acceptance / rejection of tender at any stage would be the sole discretion of competent authority.

Addl. Chief Executive Officer
Shri Amarnathji Shrine Board

No: SASB/RFID/NIT/16
Dated: 19th March, 2022

SHRI AMARNATH JI SHRINE BOARD

Instructions, terms and conditions for providing RFID Tracking and running of computerized online prepaid system on the track of Amarnath Ji.

For and on behalf of Chairman Shri Amarnath Ji Shrine Board, sealed tenders are invited for the RFID Tracking of Vehicles, Yatris, Service Providers and running of computerized online prepaid system on the track of Shri Amarnath Ji.

1. Introduction:

- a) Amarnathji cave is a Hindu shrine located in south Kashmir Himalayas in Jammu and Kashmir, India. The cave is situated at an altitude of 3,888 m (12,756 ft), about 141 km (88 mile) from Srinagar, the summer capital of Jammu and Kashmir and can be reached through Baltal & Pahalgam town. The shrine forms an important part of Hinduism, and is considered to be one of the holiest shrines in Hinduism. The cave is surrounded by snowy mountains. The cave itself is covered with snow most of the year except for a short period of time in summer when it is open for pilgrims. Hundreds of thousands of Hindu and other devotees make an annual pilgrimage to the Amarnathji cave across challenging mountainous terrain.
- b) The peak pilgrimage occurs when the iced stalagmite Shiv lingam reaches the apex of its waxing phase through the summer months. Each year the pilgrimage begins June/July and continues till Raksha Bandhan (Shravan Poonima).
- c) The number of pilgrims to the site has risen from around 12,000 in 1989 to over 400,000 in 2007. This popular yatra destination for Hindus, received about 634,000 people in 2011, the highest recorded number for the site. The number was 622,000 in 2012 and 350,000 in 2013. Pilgrimage in 2020 was cancelled due to Covid-19 pandemic.
- d) The pilgrimage is managed by Shri Amarnathji Shrine Board, an autonomous statutory body constituted by legislature of Jammu & Kashmir in 2000. Hon'ble Lieutenant Governor of Jammu & Kashmir is the Chairman of the shrine Board. He is assisted by a CEO, an Additional CEO, one Chief accounts officer and other officers and staff of the Board.

2. How to reach at Amarnathji Holy Cave:

- a) The Holy Cave can be approached by two routes:
 - I. The shorter Baltal route (14 Km) from Ganderbal district.
 - II. The traditional but a longer route from Pahalgam side (32 Km) from Anantnag district.
- b) A devotee has a choice to opt for either of the two routes.
- c) One must be between the age group of min. 13 Years- Max. 75 years of age and compulsorily have a health certificate from authorized Medical Officers to undertake this pilgrimage. Rest of the details may be obtained from shrine Board's website www.shriamarnathjishrine.com.

3. Number of Pony/Pithu/Palkiwallas registered during Yatra 2019

Details of Ponies / Pithus and Palkiwallas registered with district Administration Ganderbal and Anantnag is given in the following table: -

S. No.	Particular	Pahalgam side	Baltal Side
		Number/ Max	Number/ Max

1.	Ponies	5220/5500	2699/6000
2.	Pony Rider	4077/5500	2663/6000
3.	Pithus	4011/4000	2607/3000
4.	Palkiwallas	1455/1500	4712/7000

4. Yatra Statistic:

S. No.	Year	Darshan figures
1	2016	2,20,490
2	2017	2,60,003
3	2018	2,85,006
4	2019	3,43,587

5. Objective of the Tender:

Shri Amarnathji Shrine Board has always endeavoured to provide best of facilities for the pilgrims visiting the Shrine from all over the country. As such, the Board intends to develop an automated system on digital platform which is in the interest of visiting pilgrims as well as service provider (Pony / Pithus / Palkiwallas). As elaborated in subject of this Tender, Shrine Board intends to allot the work for design, install, commission and operationalize on Built Operate & Transfer (BOT) model in comprehensive way with the following requirements: -

- a) A computerized integrated system for pre-paid billing of services for various pilgrims utilizing Pony / Pithu / Palki services. This shall require establishment of counters enroute to Holy Cave (from both Chandanwari & Baltal side), sufficient in numbers catering the need as identified by the Board.
- b) RFID tracking of Pilgrims and service providers for e-surveillance in the main control room at Baltal and Chandanwari with proper end-to- end MIS reporting on real time basis. The MIS reporting system should be user friendly which shall include well designed GUI dashboard.
- c) Robust MIS of pony/pithu/palkis reservation module for reporting in different formats (as desired by Shrine Board) which is compatible with all the operating systems especially (Window/Android/IOS), should be put in place with real time integration of data. System generated daily report must be submitted every day to Shrine Board which shall include the date, time, nature of fault if any, restoration time etc. to evaluate the 'uptime' of the system. Besides the system be so designed to generate other reports on regular basis as desired by the Board from time to time.
- d) As part of automation, system/software should manage the pilgrim seeking services of pony/palanquins/pithu visiting the Shrine in seamless and hassle free way. The system should be capable to track pilgrims as well as porter over the track through RFID and then generate reports using various criteria on real time basis as per the requirement of the SASB. The system intends to register (tagging) each and every pony, palanquins, labourer and service seeking pilgrim. Each pre paid /registration counter has to be online by connecting them to Main Switching Centre (MSC).
- e) As a part of automation SASB wants to provide a handholding to the security forces for tracking the vehicular movement carrying pilgrims from entering/halting point enroute to the base camps of Shree Amarnath ji shrine. The bidder must ensure to develop an integrated system where in SASB/security forces/Administration should be provisioned with the real time tracking of groups and individual movement of vehicles moving towards base camps.

- f) The Project should be capable to track Pilgrims, Mules on the track and then generate reports using various parameters. A robust connectivity/ communication network plays an important role for smooth execution of this project. Administration wants to implement a robust network based pre-paid system and tracking of all the Mules working on Shri Amarnathji track through network which will make MSC as a Primary Switching Centre to communicate with all pre-paid as well as verification centre on the way. This Project should have a strong RF network Communication as its Back bone with at least 700 Mbps bandwidth. The network must have an uptime of more-than 95% and if the uptime continuously remains less than 95% than Shrine Board will reserve the right to invoke the termination clause of the NIT.
- g) MAIN SWITCHING CENTRE (MSC) will work as a main control centre for report generation, database management, maintenance, real time mule tracking, hot line Session Initiation Protocol (SIP) communication, grievances/ Complaint management, monitoring of transactions etc with respect to this pre-paid billing. A strong RF based network has to be established which will connect all the counters with MSC. The servers placed at MSC must generate all the requisite detailed reports online as required and demanded by SASB. IP based Camera should be installed at all the pre-paid counters which will be accessed with full privilege rights at MSC to monitor important activities at all these counters. The bidder shall take periodic backups of the data to avert data loss due to any eventuality during the entire period of contract.

#	Particulars
i.	The Main Switching Centre will provide centralized services and control for the project.
ii.	Management of Computerized Pre-paid Billing System, E-Security system and Porter Management System will be done at this location.
iii.	Surveillance of all the Pre-paid Counters will be done at the same location.
iv.	Whole Network will be monitored from this location.
v.	The MSC cum control room will provide 24 x 7 technical support/ assistance for all the Pre-paid/ Verification Counters around the holy track.
vi.	A complaint/ grievance management for complaints, queries and suggestions from Yatris would be raised at MSC.
vii.	SIP Server (session initiation protocol) will be installed for voice communication between the checkpoints.

Targeted Audience	Pilgrims Visiting Shri Amarnath Ji Shrine Board
Project Completion	20 days for complete setup and 1 week for beta testing
Monitoring	The IT & Enforcement wing of the SASB with executing agency will monitor the project and its functioning.
Audit	To ensure that the project remains relevant and reasonable in legal, financial and economic terms an evaluation Committee could be framed.
Sustainability	The project should be sustainable in nature and will provide the services for next 05 years.

6. Services to be provided by the bidder:

- a) Customized Software as per requirement of the SASB has to be provided by the bidder for which no cost shall be paid by the SASB.

- b) Hardware Infrastructure as per requirement of the project has to be provided by the bidder for which no cost shall be paid by the SASB.
- c) All requisite networking equipments, hardware and allied material required for the said project has to be provided by the bidder for which no cost shall be paid by the SASB.
- d) The bidder shall create, install and establish RF network required for operating these prepaid counters and MSC at its own cost. The bidder shall ensure a stable Last Mile connectivity of MSC with all pre-paid counters. A perfect routing system for the said project has to be implemented by the bidder. The bidder shall ensure a network uptime of 95% with atleast 700 Mbps bandwidth for which no cost shall be paid by the SASB. All necessary licenses shall have to be obtained by the bidder and no fee of any sort will be paid by the SASB.
- e) Installation and Commissioning of UHF RFID tracking of vehicles moving to Shri Amarnath yatra base camps as per the security agencies.
- f) Installation and Commissioning of the Hardware, Software and Network has to be done by the bidder for which no cost shall be paid by the SASB.
- g) Man Power/ Resident Engineers/ Operators and any other staff required for the operation & maintenance of the said project shall be provided by the bidder for which no cost shall be paid by the SASB
- h) Bidder shall maintain and execute the said project as per the MOU.
- i) All the equipments, customized software, with source code and communication equipments will be the property of SASB after the term time for which Bidder shall provide necessary training to the SASB Staff. Bidder has to clearly indicate the end-of-life period for each and every item used in the project.
- j) Bidder will ensure real time reporting of all data generated by IP Cameras and RFID units through MSC that shall be linked to Internet.
- k) Bidder will ensure sufficient Power backup at all pre-paid Counters as well as MSC so that the work in any of the counter does not hamper for which no cost shall be paid by the SASB.
- l) Bidder will ensure proper transportation of the goods for which no cost shall be paid by the SASB.
- m) SASB shall provide space for pre-paid counters and MSC.

7. Expected Outcome and Solutions:

- a) Digital registration of service providers with their credentials like Photograph, Personal details, Address Details, Medical records and Biometric information needs to be done and issuance of RFID based Smart card to registered and authenticated Pony hawker/Porter in- order to make a secure and tamper proof system.
- b) UHF tagging of pilgrims visiting Shree Amarnathji Shrine Board with their yatra slip.
- c) As a part of automation SASB wants to provide a handholding to the security forces for tracking the vehicular movement carrying pilgrims from entering/halting point enroute to the base camps of Shree Amarnath ji shrine. The bidder must ensure to develop an integrated system where in SASB/security forces/Administration should be provisioned with the real time tracking of groups and individual moments of vehicles moving towards base camps.

- d) Setting up a network based online Prepaid Billing system at all important locations including at Baltal, Domel, Railpathri, Brarimarg, Sangam down, Sangam top, Lower Holy Cave, Upper Holy cave, Panjtarni, Poshpatri, Sheshnag, Pissu top, Chandanwari, Nunwan and any other desired location by SASB, in-order to facilitate yatris in hiring Pony/Pithu and Palkiwallas and also set up a grievance redressal system for resolving the complaints regarding misbehaviour, overcharging etc.
- e) RFID tagging must be integrated with ear-tagging already undertaken by Animal Husbandry Dept., J&K so as to enable tracking of every pony plying on the track through its unique ear-tag number or RFID on real time basis, at any of the prepaid counter and MSC.
- f) Yatra parchi with Bar-code currently generated for each yatri must be integrated with the user receipt to be generated at the prepaid counters. This should enable tracking of pony users through individual yatra slip numbers as well.
- g) E-surveillance of movement of Pilgrims and Ponies/Pithus/Palkiwallas on RFID based system shall be implemented so that tracking of Pilgrims, Pony/Pithu and Palkiwallas could be done in real time and with proper MIS reporting.
- h) MIS shall be generated for the authorities of the Shrine Board in the format as desired by SASB.
- i) Adequate systemic arrangements including manpower and cash shall be made available at all the prepaid counters to ensure prompt payments to the service operators on production of prepaid receipt.

8. Eligibility criteria:

- a) The Companies/ Registered Agencies/ Firms should have a minimum experience of 5 years of executing similar works regarding the Computerized Online prepaid management system and RFID Tracking System as specified in the tender document.
- b) The Company/ registered Agencies/ Firms should have relevant ISO Certifications for implementing similar project in any other place.
- c) The tenderer should be an Income Tax payee. Copies of Income Tax Return, Balance Sheet, Profit & Loss Account for the last three financial years must be enclosed.
- d) The Company/ registered Agencies/ Firms should have executed atleast one project of computerized prepaid billing and tracking of mules / persons etc. using RFID Technology valuing atleast Rs. 50.00 lakh over the past 3 years.
- e) Annual turnover of the bidder must not be less than Rs. 1.50 Crore in any particular year for last 03 years (last 3 years consolidated turnover must be more than 8 Crores).
- f) The tenderer must have sound financial background. At the time of tendering, he shall be required to submit Bank statements for the last three years. It should have positive net worth of at least Rs.50.00 lakhs each year continuously for last three years (last 3 years consolidated net worth must be more than Rs. 2.00Crores).
- g) Party shall submit its tender as a Single Bidder, Consortium or a Joint Venture as per the below mentioned detail: -

Terms and conditions in case of Consortium:

- I. If the proposal is submitted by a Consortium, then one of the members of the Consortium shall be nominated and authorized, by the other members of the Consortium, as being In-charge (Lead Member) and this authorization shall be supported by a Power of Attorney (in the format specified in Annexure-A) in favour of the Lead Member duly signed by the authorized signatories of all the Consortium Members.
- II. Members of the Consortium shall submit the deed to form a consortium for the purpose of submitting the Proposal which shall, convey the intent to enter into the Agreement and subsequently carry out all the responsibilities of the Successful Bidder and undertake the Project.
- III. In case the work is awarded to the Consortium, this should clearly give in detail, the proposed roles and responsibilities of each member at each stage and the proposed number of members of the Consortium. There should be only one prime bidder. Roles and responsibilities of each member of the consortium should be clearly defined. All the members of the consortia including the lead member should be a company registered in India as per the Companies Act and should have the following valid documents:
 - GST Registration Certificate.
 - Income Tax Registration/ PAN Number.
- IV. A copy of the certificate (Annexure – B) on a judicial stamp paper duly authorized by a notary, stating that the bidder hasn't been blacklisted by any institution/ organization/ society/ company of the Central / State Government ministry/department, or its public sector organizations with company stamp and signed by authorized signatory shall also be submitted along-with technical bids.
- V. SASB reserves the right to reject any bid in which it satisfies itself that the one of the technically and financially more sound partner/ party to the Consortium may become dormant during the execution of the project, for guaranteeing and ensuring active participation of all the resources till the completion of the project and compliances of all the contract without causing unforeseen adverse situation to take place detrimental to the project. Further it is the responsibility of the individual member of Consortium to satisfy SASB on the importance of their role in the project until expiry of 5years from the date of execution of Agreement.

The firm should have its own Proprietary Designed & Developed Software for inspection services and should not depend on any Third-Party Company for Software.

The acceptance / rejection of tender at any stage would be the sole discretion of competent authority.

The successful agencies will be required to enter into an agreement with the Shrine Board within a period of one week from the date of award of the contract.

9. The Tenderer shall submit the following information/documents duly supported with documentary evidence wherever required, and this shall form part of the technical bid:

- a) Proof of Registration of Firm/ Company Memorandum of Association (MoA).
- b) Copy of Pan Card.
- c) Copy of Sales Tax Registration certificate.
- d) Copy of Last three financial years ITR.

- e) Bank Insolvency Certificate.
- f) Copy of ISO certificates.
- g) Annexure-A, Annexure-B and deed in-case of consortium.
- h) List of similar works carried out & List of similar works in Hand along- with satisfactory certificates.
- i) Detail of modalities regarding the implementation of the project.
- j) Company's name, core business along-with a list of qualified and professional manpower already available with the tenderer in all categories - managerial, supervisory and workers on the ground to handle such jobs, their professional qualifications and experience in the field. (Name of each professional and his qualification to be clearly mentioned in the list to be enclosed).
- k) List of equipment, electronic / electrical gadgets and other equipments available with the tenderer / ownership proof / conditions of the equipment and date of purchase. Besides, the list of machines/ equipments and other gadgets shall be provided at the site by the firm be also indicated.
- l) Back up support on engineering and system's support to ensure hassle free online prepaid billing system services.
- m) Latest technology and methods employed for E-surveillance and RFID tracking of Mules.
- n) Approximate manpower -professional, technical and general / administrative that could be deployed on the job in each shift along with the capability of the firm / company to engage additional manpower as and when required at short notice.

10. Submission of Tender:

The tenderer shall submit its offer in two parts i.e., Technical Bid and Financial Bid. The two bids shall be submitted separately as described below:

The Technical Bid shall be kept in a separate envelop duly sealed and superscribed as Technical Bid and must depict the name/ details of the firm etc. It must contain the following documents:

- a) Schedule-A form duly filled in.
- b) Earnest money in the shape of CDR/FDR for Rs. 5.00/- Lakh (Rs Five Lakhs only).

The Earnest Money Deposit (EMD) of the successful bidder shall be adjusted with the Security Deposit of Rs. 10.00/- (Rs Ten Lakhs only) lakh and that of the unsuccessful bidder shall be refunded back to them.

- c) Document containing Instructions, terms and conditions for RFID Tracking and running of computerized online prepaid system on the track of Shri Amarnath Ji, duly signed on each leaf by the tenderer, along with documentary proof wherever required.
- d) Documents mention at serial No. 9&10 of the tender document.

Financial Bid shall contain the Schedule-B form duly filled in and should be kept in a separate envelope duly sealed and superscribed as Financial Bid.

The two envelopes (Technical Bid & Price Bid), sealed separately and superscribed as RFID tracking and running of computerized online prepaid system on the track of

Shri Amarnath Ji shall be kept in another envelope, which shall be duly sealed. This “main” envelope should then be superscribed as: “Tender for RFID Tracking and running of computerized online prepaid system on the track of Shri Amarnathji”

The bid shall remain valid for a period of four months from the last date of receipt of Bids.

11. The scope of work to be executed:

This whole project is the amalgam of: -

- i. Software (server application and client application) and Database software like SQL, Oracle, Server software/OS (Latest Version), etc
- ii. Web-services
- iii. Computer Hardware including Servers and Clients
- iv. IP Cameras, NVR
- v. SIP Phones
- vi. Printers, UPS, Thermal& Laser Printer, Bar Code Reader
- vii. RFID Readers Towers
- viii. Bio-metric Scanners
- ix. LED TV/Monitors
- x. Networking Accessories
- xi. Internet Connectivity
- xii. RF Network and Connectivity with MSC
- xiii. Installation and Commissioning of hardware, software and network
- xiv. Execution, operation and maintenance of the project
- xv. The components supplied should be as per the technical specifications mentioned in Annexure 2 of this document.

A. SOFTWARE (SERVER APPLICATION AND CLIENT APPLICATION) And Web-Portal

I Registration Module

i. Registration of Ponywala/Pithu/ palanquins:

a. Porter Registration:

The first important phase of the system will be the collection of information pertaining to the porters working on the Holy track. Porter registration form must be dully verified by the local police authorities. The main heads under this form will have the following heads.

1. Name of the Porter
2. Photo of the porter
3. Parentage

4. Blood Group
5. Age
6. Mobile Number
7. Registration No.
8. Porter Type
9. Residence Address
10. Validity
11. Whether verified by Police

b. Porter information Refining:

The porter information received should be refined so as to ensure data integrity. The process followed for this will be conversation with the constituent and by cross examining his photograph on the form received. The process involves capturing of Digital photograph of the porter individually and storing his biometrics for later use. The Biometrics must be taken in a high resolution scanner. The Bio data of the porter should be then uploaded to the database server for later use. The refined data must be uploaded into the database which is later used in the following phases of the project.

- i. The Biometrics of the porter should be incorporated into RFID smart card of the Porter.
- ii. The picture of the Porter will be used for printing on the RFID smart card of the porter along with his credentials.
- iii. The same credentials of the porter must be used in billing system at all the prepaid counters, where the prepaid counters use the data for verification.

c. Registration of Pony:

Medical certificates of the pony issued by the Veterinary doctor to the ponywalla (owner) must be digitized and stored in the database. Then the system should generate a unique id for every medically fit pony. The same ID must be punched to the RFID tag. This Unique Id must be associated /linked with the credentials of the pony owner in the master database. This unique id is also linked with the central database. The RFID tag should be tamper proof and suitably fixed on the body of the animal.

1. Generating a Unique ID for medically fit pony.
2. Associating this Unique ID with pony owner's credentials.
3. Associating same ID with RFID tag.

II. Pre-Paid Billing System/Software:

- a. The Porter Management phase includes allotment of work to the porter at any prepaid counter.
- b. The RFID smart identity card which has the credentials of the porter along with his photo and must be verified before allocating any pilgrim at the prepaid counter. The RFID smart card of the porter shall be used to retrieve his unique identity into the prepaid billing software through RFID system.

- c. Every payment receipt must be linked to the Porter information and RFID tag of the Pony, which will enable tracking of the Pilgrim as well as Porter during the Yatra.
- d. The original copy of the payment receipt must be provided to the pilgrim, which he is entitled to hand over to the porter on completion of his yatra, so that porter can receive his dues from the counters by depositing this receipt (a proposed design of payment receipt is given below).
- e. A highly secure RF network based Prepaid Billing Software shall be developed by the bidder for the execution of this project on real time basis.
- f. A high end Server with a backup server will be installed at main switching centre, Baltal which will be connected to all the checkpoints and pre-paid counters through a strong network that shall be established by the bidder at its own cost. The clients at the checkpoints must continuously be linked to the server. All the information about the number of receipts generated, the total collection, total tax collected, total payment made, payment left etc should be available at the main control room.
- g. RFID readers which will be installed at checkpoints that will read all the tags that pass through and will keep on pushing data to the server through secure HTTP API or any other suitable API. This process will help in tracking the Pony and the Yatri.

III. Sample receipt:

Jai Mata Di
Shree Mata Vaishno Devi
shrine Board
PREPAID RECEIPT
 3/16/2012 12:49:42PM



Porter No.	000001
PName	Seia Ram
Type	Pony
Receipt No	1
From	Katra:100
To	Bhawan

Name	Sunil Kumar
Age	40
Sex	M
Weight	Adult 75 Kg to 100 Kg
Labour	356.52
Service Charges	42.78
Welfare	10.70
Amount	410.00



Barcode for Genuineness of Receipt

Yatri information can be of help in case of some emergency etc.

Above slip may be treated for purpose of Sample only and same is required to be customized at the time of implementation of project. The customization of slip shall be done in consultation with Shrine Board. System installed by the bidder should be in position to change the format as and when required.

- a) The pre-paid counters must be linked with the main server at MSC and have all the facilities like Receipt generation, receipt printing and reports generation etc. The day

report contains all the data of individual receipts generated, total number of receipts for the day, besides all the totals of the collections with individual breakups.

- b) A complete Analytic Web Application for reporting should be developed which will provide the real time information of the total calculations like 'Hire Charge', 'User Fee', 'Total Pre-paid Amount', at a particular pre-paid counter. This application must also provide the information about the total money imparted to the Porters and will also show the real time money earned record of every porter during the whole year or at particular day, or at particular time.
- c) All the information will be provided online through web based services through a centralized location i.e. MSC.
- d) A high end RF communication network will be setup with its server installed at the MSC.
- e) A backup server shall also be installed at the MSC for any backup purpose.
- f) For the full functional system, all checkpoints have to be setup and connected to the MSC.
- g) For the surveillance purpose High quality IP cams and NVR will be installed at all pre- paid counters for surveillance. The IP cams installed at all these prepaid counters should also be viewed/monitored from the MSC.
- h) A main NVR shall be installed at MSC which will also store and manage the recording at all these prepaid counters.
- i) Session Initiation Protocol (SIP) phones shall be installed at all the prepaid counters which shall communicate with each other as well as with the MSC.
- j) Session Initiation Protocol (SIP) server shall be installed at MSC.

IV. Report generation:

- Reports of all stations must be generated from central server as well as the respective counters.
 - Real Time details from prepaid counters.
 - Reports in Xlsx/Csv/PDF (or in any other format) as desired by SASB for administrative purposes.
 - Daily/weekly/monthly/yearly detailed report generation as per the requirement of the SASB.
- V.** Software application should be a robust and on Real time basis.
- VI.** Software administration authorisation with privileges should be there.
- VII.** Periodic (Daily/weekly/monthly/yearly) data backups during the entire period of the contract.
- VIII.** Backup of Video Data from the IP Cameras should also be ensured by the bidder up during the entire period of contract. The firm must have a provision of recording atleast60 days coverage of all the cameras installed on the track/counters.

B. Technology Details:

The solution should be developed using the highly reliable, secure, standard front end and back end Development platform. Any cost evolved in the development of this module has to be borne by the bidder. Any front end / back development software kit/studio required for the said purpose has to be acquired by the bidder. No extra charges in this regard shall be paid by the SASB.

- Microsoft Windows Server /Linux (Latest Version) or any higher/better as per the need of the project (Servers OS)
- Microsoft Windows (Latest Version) or any higher/better as per the need of the project. (Client OS)
- Microsoft SQL /Oracle Server (Latest Version) or any higher/better as per the need of the project. (Server Database)
- Microsoft IIS (Latest Version) 7.5 or any higher/better as per the need of the project. (Web Application/API Server)
- Microsoft ASP.NET MVC or any higher/better as per the need of the project. (Web Application Framework)
- Microsoft ASP.NET Web API or any higher/better as per the need of the project. (HTTP Web API Framework)
- Microsoft Windows forms/WPF or any higher/better as per the need of the project. (Client Application Framework)
- C#, .Net or any higher/better language as per the need of the project. (Primary development language)
- SQL Lite database for client machines or any higher/better as per the need of the project. (Client Database)

C. Hardware Requirements:

- Servers –A high-end, branded (IBM/ HP/ ACER/DELL) server with latest configuration/specification as per the requirement of the module and project.
- Client Machines (Actual Quantity depends on number of counters) High-end, branded (IBM/ HP/ ACER/DELL) Desktop computers with latest configuration/specification as per the requirement of the module and project.
- Cameras preferably with SDK.
- IP cameras
- Biometric Scanners.
- Thermal Printers.
- RFID scanner/ readers with SDK
- NVRs
- IP Exchange (SIP server) and phones
- UPS with 48 hours backup at all the locations

Following hardware would be required for execution of project. It is pertinent to mention that this is a tentative requirement which may vary at the time of finalization:

The bidder shall provide detailed specification of components mentioning E.O.L of every product.

Products	Places	Requirement
Laptops	All Prepaid counter	Required for prepaid billing client software, verification etc.
Rack servers	MSC	Required for server application, report generation and monitoring etc.
Thermal printers	Prepaid counters	Required for printing of Slips
RFID scanners	Prepaid counters	Required for reading RFID tags on Ponies
Biometric Scanners	Prepaid counters and MSC	Required for recording the biometrics of porters and for verification at prepaid booth.
Solar Backup/UPS	Minimum 3 KVA at MSC and 2 KVA at all pre-paid counters with minimum 48 hours backup.	Required for providing the uninterrupted power supply
IP cameras	All the pre-paid counters	Required for surveillance of registration counters. The firm shall ensure that PTZ cameras are installed outside each and every pre-paid counter.
Network Video Recorder	At MSC and all the pre-paid counters	Required for recording the input of the IP cameras
Transmission Rack as on the pre-paid counters.	42U or suitable size rack with accessories at MSC. 9U or suitable size rack with accessories @ Prepaid counters.	Required for structuring the Network products and placing the Rack Servers
L2 /L3PoE switch as per the network requirement	At all the counters	Required for networking
24 Port L3 switch	MSC	Required for networking and routing
Branded IP Exchange (SIP SERVER)	MSC	Required for management of voice communication
Branded SIP Phone	All Prepaid Counters and MSC	Required for voice communication
LED Screens	Minimum 55" at MSC. 32"/34" at all the prepaid counters	Required for displaying the live output of cameras at MSC as well as on the pre-paid counters
Accessories and cabling	All places	Required for networking at Prepaid counters and MSC
Laser printers	Heavy duty laser printers at MSC and Small (format) laser printers at all prepaid counters	Required for report generation
RF ID readers	Pre- paid counters	At least two at each pre-paid counter for management of pony/pithu/palki movement.

(Note: The Bidder shall provide costing of every product/ component).

D. Connectivity/communication:

- a) The agency should establish a robust network based online Prepaid Billing and tracking of mules working on the Holy track of Shri Amarnathji with MSC, as a Primary Switching Centre/Data Centre to communicate with all pre-paid counters.

- b) It is recommended that the bidder may conduct a survey of the area and workout the feasibility of the said project. A schematic diagram has to be provided by the bidder while bidding. Path profile has to be submitted for each above said points. A Feasibility report for setting up a strong and suitable communication RF network between all the points and MSC, must be provided by the bidder. The detail of networking equipment for forming the required network for the said project has to be worked out by the bidder and should be submitted along with the bid. All the counters on the track and MSC, have to be installed, commissioned, operation and maintained by the bidder at its own cost. Resident Engineers of the bidder should ensure uninterrupted communication.
- c) The entire Network (RF) must be installed properly. Routing of cable must be done in a structured manner by using cable managers and ties. All the guidelines of WPC must be followed.
- d) 48 hours Power Backup should be ensured at all prepaid counters, with secondary backup provision.
- e) An IP based Telephone Exchange Session Initiation Protocol (SIP Server) and Rack Server will be installed at MSC. All Prepaid/checkpoint counters and MSC should be provided with SIP Based IP Phone for seamless communication. The IP based Telephone Exchange will be integrated with network, which will further provide inter communication between all the counters and MSC on the track.
- f) Network Video Recorders (NVR) with LED Screens will be installed at all the prepaid counters. The NVR at all the prepaid counters will be further connected to the main NVR at MSC, so that all the IP cameras can also be monitored at MSC. The NVRs must have a provision of recording 60 days coverage of all the IP cameras. Parallel backup for NVR on other locations will also be ensured.
- g) At least Two IP based cameras will be installed at each Prepaid Counters which can be accessed remotely at MSC to Monitor Important Activity on all pre-paid counters of Yatra route. PTZ cameras should be installed outside each and every pre-paid counter on the track.
- h) Earthing of each Point shall be done with, recommended value of earthing to be <5 Ohm.

E. Installation and commissioning:

All the hardware and network will be installed and commission according to the requirement at each prepaid counter and MSC/Primary Switching Centre/Data Centre). Following are the tentative details of products to be installed at various points, the actual requirement may vary at the time of finalization of project:

a) MSC:

S.No.	Product	Qty	Remarks
1	Rack Servers with all the required software including operating systems, MS Office, Database Software, Antivirus and other required software etc.	4	Required for application and report generation Server(s) etc.
2	Laptops with Anti-VIRUS	2	Required for Server Access
3	Server applications		Required for Rack Server
4	Transmission Rack 42 U	2	Required for structuring the N/W Products
5	Heavy duty NVR (capable of recording 60 days recording of all the cameras on the pre-paid counters/track.)	1	Required for input of the all IP Cameras as well as NVRs at pre-paid counters.

6	Branded IP Telephone Exchange (SIP Server)	1	Required for Voice Communication
7	55 inch LED	4	Required for displaying Live output of cameras
8	24 Port Layer 3 Switch	2	Required for Networking and routing.
9	Cabling, Other Accessories and networking equipments		As per actual network requirement
10	Branded SIP PHONE	2	Required for communication
11	Router (as per requirement)	2	Required for Networking
12	Biometric Scanner	10	Required for capturing Biometrics
13	Heavy Duty Laser Printer	2	For daily report generation
14	Solar/UPS 3KVA with minimum 48 hours backup.	2	For power backup
15	Heavy duty Generator for	2	For power backup at MSC.

(Note: The Bidder shall provide costing of every product/ component).

b) Prepaid Counters:

Following are the tentative details of products to be installed at various points; the actual requirement may vary at the time of finalization of project:

S.No.	Product (Each Counter)	Qty	Remarks
1	Desktop Machines	2	Required for registration, verification, etc
2	Thermal Printer	2	Required for printing Slips
3	Biometric Scanner	2	Required for biometrics.
4	IP Camera	2	At each pre paid counter. At least one PTZ camera should be installed outside each and every counter on the track
5	2 KVA UPS with 48 hours backup	1	Required for providing the uninterrupted power supply
6	Transmission Rack	1	Required for structuring the N/W
7	Networking equipments		As per actual network requirement
8	SIP PHONE	1	Required for communication
9	L2 PoE network Switch	1	Required for Networking
10	Required software on the machines to run the application	2	Required for prepaid booking of porters.
11	Weighing Machine	2	Required for checking weight of Pilgrim
12	Thermal Paper		As per actual requirement
13	Thermal Printer	3	Required for receipt printing and one as stand by.
14	NVR	1	Required for recording of IP cameras capable of recording 30 -45 days data.
15	LED Screen	1	Required for the display of NVR.

(Note: The Bidder shall provide costing of every product/ component).

This list at a & b above is indicative only and quality of machines as depicting may increase depending upon the requirement.

F. Execution of the project:

- I. Well Trained staff/ operators shall be required to execute and operate these counters and MSC. Operators, engineers and at least one executive shall be required at MSC.
- II. To ensure uninterrupted communication, bidder will provide resident engineers on Track.

- III. Training sessions & handholding of security agencies / administration for RFID tracking of vehicles out side yatra area will be provisioned by the successful bidder. The bidder must ensure to develop an integrated system where in security forces/Administration should be provisioned with the real time tracking of groups and individual moments of vehicles moving towards base camps

G. Counters Details:

The indicative points where installation of pre-paid counters will take place are: - Baltal, Bararimarg, Holy Cave, Panjtarni, Sheshnag, Pissu Top, Chandanwari etc.

However, the number of counters may increase in future, the scope of which shall be within the ambit bidder only.

H. Broader Scope of work for Vehicle Tracking using UHF RFID Tags

1. INSTALLATION OF RFID READERS

- a. Bidder must install GPRS based RFID readers to track the movement of vehicles with UPS backup at the check points given at Annexure 1 (with BOM) as directed by the SASB/security forces/Administration.

2. ISSUANCE OF RFID UHF TAGS TO VEHICLES

- High adhesive RFID tamper proof tags with 12-meter detection range.
- Provisioning cuts on the tags to make it tamper proof and could be stick on windshield in harsh environment using 3M certified adhesive.
- RFID chip used inside: Higgs3/Higgs9/Monza r6

3. PUNCHING VEHICLES DETAIL TO INTEGRATED ONLINE PORTAL.

- Vehicle Number
- Vehicle Type
- Driver Name
- Mobile number
- RFID tag number

4. ATTACHING A PILGRIM TO A PARTICULAR VEHICLE

- Vehicle number will be added to the portal
- Unique yatra number of the pilgrim/ data from Scanning the QR code from yatra card.

5. EXECUTION

- Setup RFID readers at various checkpoints
- At various registration kiosks, RFID tags will be attached to the vehicles
- Scanned QR code data/unique pilgrim number of pilgrims will be added to the system against the vehicle they are boarding
- Once vehicle moves, the RF-ID readers will push the tag number to server
- Server data will be used to locate the vehicle in real time
- As pilgrims are mapped to the vehicle, one can find location of each pilgrim.

6. Successful Bidder must ensure to provide sufficient number of handheld QR scanner for reading the QR code at every check point.
7. Successful Bidder to supply sufficient number of RFID tags along with other equipments, as required, at various locations, as required by the SASB, to track the movement of vehicles enroute to & from both the base camps in UT of J&K.

12. Other allied Services:

- a) The bidder shall also make necessary alternate arrangements in case failure of the intranet system so that the pre-paid & tracking system should not interrupt in any case.
- b) Booking Software: The bidder shall provide a well designed, secure/reliable booking software with all features/options for counter booking of the services of Pony/Pithoo/Palkiwala.
 - i. The bidder shall make a provision in his designed booking software to check the health certificate of the Pony and modalities should also be fixed in such a way that after how many Kilometres of the journey, the health check-up of the mule shall be done and in-case the health check-up of the mule is expired the system/booking software shall not issue a booking slip to that particular mule.
 - ii. The payment to the pithu/palki/ponywala shall be made on real time basis and they should be paid on the same day and a provision in the booking software shall be made in such a way that if the pony has been booked at prepaid booth, the concerned operator can also get his payment at Prepaid booth after rendering satisfactory service to the pilgrim, that is the payment shall be made only after having the signature of the user/yatri on the back side of the booking slip confirming satisfactory journey.
 - iii. The bidder shall incorporate a module "Cash Auditor" in the booking software so that at any point of the time the collected cash could be tallied with the booking made so that overcharging at prepaid booths could be checked.
- c) RFID tags shall be fixed properly (Tamper proof) on the pony (in neck or any other suitable part of pony) for its identification and tracking during the journey on the track enroute Holy Cave and if Pony operator intentionally breaks the RFID tag, his mule shall be shunted- out of the system and will not be liable to ply on the track & get the business through pre-paid counters.
- d) The bidder shall place/install RFID trackers along the track so that the movement of the pony could be tracked after starting from Baltal and Chandanwari.
- e) The bidder shall create RF intranet/network facilities for the running of the pre-paid system on the track at its own cost.
- f) Vehicle Tracking:
 - A. The Bidder shall setup RFID readers at various checkpoints enroute to the yatra base camps.
 - B. At various registration kiosks, RFID tags will be attached to the vehicles
 - C. Scanned QR code data/unique pilgrim number of pilgrims will be added to the system against the vehicle they are boarding.
 - D. Once vehicle moves, the RF-ID readers will push the tag number to server.
 - E. Server data will be used to locate the vehicle in real time.

- g) As pilgrims are mapped to the vehicle, so that one can find location of each pilgrim vis-à-vis the tagged vehicle.
- h) The successful bidder shall set up sufficient number of RFID distribution / collection centres at various locations in Jammu / Srinagar / both base camps etc., as decided by SASB.
- i) Data: The Bidder shall ensure full fledge security of entire data including Video recording of all the cameras during the entire period of the contract, which shall be made available to SASB as and when requested. The prime responsibility of data security shall rest with Bidder/service provider.
- j) The roaming of the undesired and unregistered mule on the track shall be identified by means of alarm system and the same information shall be given to the concerned Area/Unit Head of Enforcement Inspector (Names of which along-with mobile numbers shall be provided to the bidder by Shrine Board) to penalize them with a fine. For undesired parking, the concerned pony operator shall not be given business for next 72 hours.
- k) The Bidder before submitting the tender shall make out an extensive survey on the track for making himself familiar with the conditions on the track and also submit the details regarding the numbers of pre-paid counters to be constructed along-with the details of the locations. Shrine Board reserves the right to increase or decrease the number of counters in future as per the need and requirement of the Shrine Board.
- l) The bidder shall install biometric devices at each and every pre-paid counter for the login and log out for the service providers.
- m) A help-desk shall be created at Chandanwari and Baltal by the bidder to address the yatris complaints and for giving them information for all their needs.
- n) AN IP phone shall be provided at every prepaid booth for any technical assistance along-with counter to counter intercom facility.
- o) RFID: Bidder shall install at least two RFID gates at each prepaid counter on the track with fixed readers and antennas attached to it at each and every pre-paid counter for check-in/check-out of the Pilgrims and ponies in the system. The RFID gate shall handle the following applications:
- To confirm that all Pilgrims and service providers passing through are tagged at departure from each pre-paid counter.
 - Can judge/identify RFID tags on equines in mobility to avoid any queues at counter.
 - Un-tagged mule shall not be allowed to enter on the track.
 - Immediately after intercepting untagged mule, an alarm shall be popped on nearby checkpoints and the said mule shall be taken out of the area.
 - If an untagged mule is sent back to the parking area due to annual check-up expiry, bad health etc. then all RFID gates in the system shall instantly receive a notification with regard to the mule which should be stopped and sent back.
 - Data of mules crossing a particular gate to be evaluated at Main Switching Centre (MSC) on real time basis.

- It should be mandatory for all the mules to pass through the RFID gate before starting the journey and the bidder shall deploy its manpower to ensure that every Pilgrim, mule and service provider crosses the RFID gate.

13. Financials:

The project will be implemented in PPP (BOT) mode in which all CAPEX & OPEX shall be borne by the bidders and in lieu thereof they shall be allowed to charge a minimum 'User Fee' per billing of services hired for Pony/Pithu/Palkis. The financial bid will be based on minimum amount of 'User Fee' being offered and other points as mentioned in the financial bid. The bidder shall provide year-wise break up of CAPEX & OPEX for each year for the period of contract.

Shrine Board reserves the right to alter, accept or reject part or all the Tenders without, assigning any reason thereof. Mere submission / offer / acceptance of Tender does not entitle the interested party any claim / interest. The important details with respect to Tender are as below:

S. No.	Particulars	Remarks
1	Tender fee	Rs.1,180/- including GST @ 18% on Rs 1,000/- (Non-refundable/Non-transferable) in the form of Demand Draft for Chief Accounts Officer, SASB.
2	EMD	Rs.5,00,000/- in the form of CDR/FRD for Director Finance / Chief Accounts Officer, SASB.
3	Tender document can be downloaded from	www.shriamarnathjishrine.com
4	Last date & time for submission of Tender document	_____ March, 2022 by 3:00 PM
5	Place of submission of Tender Document	Office of the Addl CEO, Shri Amarnath Ji Shrine Board, Chaitanya Ashram, Talab Tillo Jammu-180002
6	Pre-Bid Conference	_____ March, 2022 at 11 AM
7	Email for communication	sasbjk2001@gmail.com

Schedule of the Presentation:

Date: _____ Venue: _____ ,

S. No.	Particular	Time
1	Submission of Presentation in ppt format	_____ March, 2022 at 11 AM
2	Presentation Session will start	11.30 AM
3	Lunch Break (30 minutes)	2:00 PM
4	Resumption of Presentation, if required	2.30 PM

Tender submitted without the requisite EMD shall be out-rightly rejected. The Shrine Board reserves the right to accept or reject any or all the Tenders without assigning any reason thereof.

14. General Conditions:

- a) That work allotted to the firm shall be for a period of five years commencing as per the date mentioned in the agreement executed with Shri Amarnath Ji Shrine Board. The CEO, SASB / Addl. Chief Executive Officer, SASB reserves the right to accept or reject any one or all the tenders without assigning any reason thereof. The contract could be further extended for a period of next three years depending upon the

satisfactory performance & work done in the allotted period and further subject to the approval by Chief Executive Officer, SASB.

- b) The bidder shall have to bear expenditure for any loss / damage caused to the property of the Shrine Board by his workers intentionally or un-intentionally, failing which the same shall be recovered from his deposited earnest money.
- c) That the firm shall deploy the manpower for all the three shifts viz morning, evening & night shifts strictly as per the strength required. However, in the event of additional manpower required in a particular shift, the same shall be arranged by the bidder.
- d) That the manpower engaged by the firm shall have to abide by the administrative and disciplinary norms as laid down by the Shrine Board. The firm shall be required to engage only well trained, disciplined and presentable manpower to carry out the job assigned to it.
- e) That firm shall provide its workforce in decent uniforms and with identification badges at its own cost. The firm shall ensure that the staff employed are properly, cleanly and neatly dressed (dress code for staff shall be indicated by the bidder) and shall be disciplined and polite to the Yatri and the staff of the Shrine Board at all times. The personnel provided by the contractor shall be of good character, physically fit, efficient and skill full in their duties. The contractor shall periodically furnish fitness certificates of the employees issued by the competent authority and shall provide their antecedents duly verified by the concerned police authorities. The firm shall ensure that its employees / workforce maintain the sanctity of Shrine and not indulge in any activity which is prejudicial to the sanctity of the Holy Shrine. Staff of the successful bidder shall not indulge in smoking or consumption of liquor/alcohol or consumption of any non- vegetarian food articles. They shall also refrain from any other activity which might hurt the sentiments of pilgrims.
- f) That the firm shall have to deposit an amount of Rs. 10,00,000/- (Rupees Ten Lakh Only) as Security Deposit/Performance Guarantee in the form of CDR pledged to Chief Accounts Officer, Shri Amarnath ji Shrine Board, for providing the above-mentioned services which shall be released after the completion of contract period subject to successful accomplishment of the contract. The security deposit shall be forfeited if the contractor prematurely withdraws or if the services are terminated for being unsatisfactory.
- g) That the firm shall provide additional manpower as and when required by Shrine Board to carry out the assigned task without any financial burden on SASB.
- h) There shall be no other liability on the part of Shrine Board and all obligations in respect to meeting requirements of Labour Laws, the charges for leave arrangements, expenditure on uniforms, insurance, EPF/PF/CPF etc. shall be the sole liability of the bidder. Any amount of claim / compensation on that account, as may be payable, shall be the liability of the firm solely and Shrine Board shall in no way be responsible for any act of omission or commission of the firm with regard to the violation of labour laws or any other law for the time being in force.
- i) The Firm shall fully comply with all applicable laws, rules and regulation relating to EPF/PF/CPF Act, minimum wages Act, Contract Labour Act, Workmen's Compensation Act and such other Acts or Laws, Regulations passed by Central, State and Local Govt. Agency or Authority from time to time.
- j) The Firm shall abide by all laws of the land including Minimum Wages Act, Labour Laws, Companies Act, tax deduction liabilities, welfare measure of its workers and all other obligations that enjoin in such cases and are not essentially enumerated and

defined herein, though any such onus shall be the exclusive responsibility of the Firm and it shall not involve the SASB in any way whatsoever.

- k) There shall be no liability on the part of Shrine Board and all obligations in respect of Sale tax, Service tax, income tax and any other tax as applicable shall be the sole liability of the bidder/firm.
- l) That Contractor shall be wholly and solely responsible for full compliance of its statutory obligations under the provisions of labour laws, environment or any other law relating to its operations / activities. No child labour shall be employed by the contractor that the work performance shall be continuously monitored and evaluated by one or more authorized Officers of Shrine Board and the weekly report shall be submitted to Central Office, a copy of which shall be made available to the bidder's representative also.
- m) The tenderer shall sign each page of tender document in token of his acceptance of the terms and conditions of the contract.
- n) That tenderer shall solely be liable for any costs, charges or expenses arising out of any claims or legal proceedings in connection with or relating to its operation / activities under this agreement. The Contractor shall be liable to indemnify and keep indemnified the Shri Amarnath Ji Shrine Board against any damages, compensation, costs, charges or expenses arising out of any claims or proceedings relating to its operations / activities.
- o) That tenderer shall be solely responsible for adequate protection and safe keeping of all its materials and equipment from damages, destruction or loss even during the non yatra period. The bidder shall identify the place of safe keeping & storage of equipments during non yatra period in consultation with SASB.
- p) That the successful tenderer shall make alternate arrangements immediately, in case its employees go on strike. If no such arrangements are made by the contractor, the contract is liable to be terminated without notice and the security deposit shall be forfeited.
- q) In case of any variation in the amount in words and figures of the bid, the amount in words shall prevail.
- r) Any cutting / over-writing in the Tender will not be allowed and the Tender will be liable to be rejected. All the pages of the bid should be serially numbered, signed and stamped by the bidder.
- s) Any contact with the press about any matter connected with the current tender proceedings may lead to the disqualification of the Bidder.
- t) Safety and security of the installations & equipment shall be the sole responsibility of the successful bidder and Shri Amarnathji Shrine Board shall not be liable for any damage caused what-so-ever. The Shrine Board shall not be responsible for any loss or damage caused to the equipment etc. belonging to the licensee, on account of any natural calamity, or otherwise.
- u) The successful bidder shall at all times ensure that its activities do not disturb, in any manner, the smooth management of pilgrimage. In case of violation of this condition, the license is likely to be revoked without any prior notice.
- v) The Shrine Board reserves its absolute right not to accept any tender/offer at any stage before execution of agreement. In case the Shrine Board decides not to accept any tender/offer in whole or in part, it shall not be required to assign any reasons thereof to the bidder.

- w) The successful bidder is required to submit Police Verification Reports and Compulsory Health Certificates of the staff to be deployed for the purpose of execution of this tender at least 15 days prior to the commencement of Yatra to SASB.
- x) The Shri Amarnathji Shrine Board shall not be liable for any damage or liability of any kind arising out of Force Majeure conditions and / or any other cause beyond the reasonable control of the SASB.

15. Termination of the Contract:

The contract shall be liable to be terminated any time subject to a three months' notice in advance from either side. However, the infrastructure/material installed by the company shall accrue to the Shrine Board as per following: -

S. No.	Termination within	Payment to be made to the bidder by the Shrine Board on the transfer of complete system installed
1	1 st year	40% of the cost of the material installed
2	2 nd year	20% of the cost of the material installed
3	3 rd year	10% of the cost of the material installed
4	4 th year	5% of the cost of the material installed
5	After 4 th year	Nil (In the 5 th year of the contract, the ownership of the complete system shall automatically get transferred to SASB and bidder shall not claim any right or payment in pursuance to any termination).

- a) There shall be no refund of the EMD & Performance Guarantee, if the contract is terminated from the bidder side.
- b) At the beginning of the Contract, the bidder shall submit a detailed cost estimate analysis of the system inclusive of all hardware components to Shrine Board which shall be vetted by the IT wing of SASB& binding upon the bidder.

16. Rights of SASB on termination:

Upon termination of contract for any reason whatsoever, SASB shall have the power and authority to:

- a) Take possession and control of Project Assets forthwith;
- b) Prohibit the bidder claiming through or entering upon the Project Assets/ dealing with the Project or any part thereof;
- c) SASB shall not be responsible for any payment due by the bidder to his sub-contractors / tenders or any other agencies. All such matter have to be settled by the bidder.

17. Selection Criteria:

All bidders shall submit documentary proof in support of meeting eligibility criteria. In the first stage of evaluation, a Proposal shall be rejected if it is found deficient as per the requirements of Tender Fee/ Bid Processing Fee/ eligibility for responsiveness of the proposal. Only responsive bids shall be further taken up for evaluation. Evaluation of the technical Bid will start first and at this stage the financial bid (proposal) will remain unopened. The Financial bids of all eligible& qualified bidders shall be opened.

18. Technical & Pre-Qualification Points:

S	Description	Particulars	Max
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No			Points
1	Technical (IT) Staff Strength on payroll	40 & above	10
		30-39	7
		10-29	5
2	Cumulative turnover: (At least 8.00 Crores for last 03 years)	>10 Crores	10
		6-10 Crores	7
		6-8 Crores	5
3	Cumulative net worth (At least 2.00 Crores for last 03 years) 2017-2020	>4 Crores	10
		2.5-4 Crores	7
		2-2.5 Crores	5
4	Work of similar nature executed (prepaid billing and tracking system using RFID technology)	Work value > 1 Crore	15
		Work value: 0.5 – 1Crore	10
5	Experience of executing computerized online prepaid management system and RFID tracking system (Atleast 5 years)	More than 07 years	10
		05-07 years	5
6	Profile Presentation (Methodology, plan & understanding, Timeline, Prestigious Awards etc.)		15
Total Score			70

19. Technical & Financial Bid Evaluation criteria:

- a) For qualifying in the technical bid, bidder has to score minimum 50 points out of 70 as mentioned at S.No. 1 to 6 in the above point matrix table failing which the financial bid shall not be opened and submitted bid shall be rejected.
- b) However, it shall be at the sole discretion of Chief Executive Officer, SASB to lower the cut-off limit suitably in-order to have healthy & sufficient competition in financial bid.
- c) Financial bids of the technically qualified bidders shall be opened and L-1 bidder shall be considered for the allotment of the contract. In-case of the tie in rates, revised sealed bid shall be obtained on the spot and again L-1 shall be considered for the allotment of the contract. In-case of tie in the second instance as well, the bidder scoring more in the technical bid evaluation shall be considered for the allotment of the contract.

20. Bid Validity:

Bids must remain valid for 120 days after the submission date. Should the need arise, however, bidders may be requested to extend the validity period of their bids. Bidders who agree to such extension shall confirm that their financial bid remains unchanged or a revised bid shall be submitted if the bidder desires so.

21. Services rendered by the bidder:

The bidder shall depute its trained personnel at prescribed locations to manage prepaid counters on Yatra Timings for a period 05 years during Yatra Period.

22. Shri Amarnath Ji Shrine Board 's rights in respect of TENDER:

- a) SASB reserves the right to accept or reject any bid without assigning any reason.
- b) SASB reserves the right to modify terms and conditions of the contract which shall be granted to the successful bidder after the bidding process, if in the opinion of the SASB, it is necessary or expedient to do so in yatris interest. The decision of the SASB shall be final and binding in this regard.

- c) SASB reserves the right to suspend and/or cancel the contract with the selected party in part or in whole at any time if in the opinion of the SASB, it is necessary or expedient in the public interest. The decision of the SASB shall be final and binding in this regard. Also, SASB shall not be responsible for any damage or loss caused or arising out of aforesaid action.

23. Award of Contract:

- a) Letter of Award (LoA) shall be issued to the selected Bidder.
- b) The selected bidder will sign the contract after fulfilling all the formalities/pre-conditions mentioned in the Letter of Award, within 7 days of issuance of the Letter of Award.
- c) The selected bidder shall commence the assignment on receipt of LoA and as per schedule given to him.

24. Security Conditions:

- a) The company shall take adequate and timely measures to ensure that information provided through it as part of this contract/agreement shall be kept confidential, secure and protected.

25. Statutory Provisions:

It shall be the sole responsibility of the successful bidder to strictly adhere to and to punctually follow all legal statutory provisions as may be applicable in the state of Jammu & Kashmir/Central Government with reference to the work under reference.

26. Pre-bid Conference:

A pre-bid conference will be held on 25th March, 2022 at 11 AM at the office of Addl Chief Executive Officer, SASB, J&K to finalize the services to be rendered by the Bidders. It is advised that after Pre-bid meeting, the Tenderers shall visit the site to acquaint themselves with the prevailing condition and other facilities available nearby. Conceptual understanding/layouts of area whichever possible will be provided to bidders during pre-bid meeting. Shrine Board reserves the right to modify the terms & conditions of NIT after the pre-bid conference in view of any practical modalities which may emerge during the pre-bid meeting.

27. Penalty:

In case of failure of the successful bidder to supply the material, execution of agreement with the Shrine Board and take up the work within the stipulated period, the following shall be imposed upon delay i.e., (i) Up to 15 days @ Rs 10,000/- per day, (ii) From 16 days up to 22 days @ Rs 20,000/- per day, (iii) From 23 days up to 30 days @ Rs 50,000/- per day, (i) Beyond 30 days, the work order shall be deemed to have been cancelled automatically. In that case, the EMD & Performance Guarantee of the successful bidder shall stand fortified in favour of SASB, debarring the firm for a period of five years from participating in SASB's future NITs and the work shall be carried out from some other alternative source.

28. Escalation:

No escalation in the user-fee (market or statutory) shall be allowed during the period of this contract.

29. Project Completion time:

20 days for complete setup and 1 week for beta testing.

30. Changes:

No variation or modification, or waiver of any of terms and provisions of these specifications shall be deemed valid unless mutually agreed upon in writing by both the parties.

31. Agreement:

The successful Bidders shall be required to execute an agreement on a valid stamped paper for strict compliance of the terms and conditions of the contract, vis-à-vis the NIT and work order within a period of Fifteen (15) days after the placement of order (please refer Clause No. 27 above in case of delay in non-execution of agreement). The supplier shall bear the legal expenses, which shall be incurred on the execution of the agreement.

32. General Security restrictions:

- a) Construction of Labour huts will not be allowed at site. However, Shrine Board will arrange the accommodation for which the rent should be borne by bidder @ Rs. 100 per employee per day.
- b) After verification of antecedents, badges will be issued to them by the contractor under the seal of the in charge SASB or bidder. The cost of badges would be borne by the contractor.
- c) As and when there will be security requirements certain additional restriction can be imposed as per the requirement of the situation.
- d) The contractor shall be responsible for behaviour and conduct of his workers. No workman with doubtful integrity of having bad record shall be engaged by the contractor.

33. Maintaining of Log Book:

- a) Intimation Procedure:- On the receipt of any complaint regarding the non-functional of system on the track, the concerned Unit Head/Area Head after recording the complaint in his complaint register book shall immediately convey the real time information (complaint) to the representative of the selected bidder at main data center on his mobile through call/text message and a copy of the same shall be endorsed to the concerned officer (nominated for maintaining log book) and to the Nodal Officer (selected by the Shrine Board) at Central Office, for appraising the higher authorities and recording of the same on the complaint register book (kept in the office of concerned Nodal Officer) for records.
- b) Mode of Communication: - The mode of communication is through E-mail, SMS, Phone or any other preferable electronic media. The bidder shall provide proper/official/working E-Mail address /Mobile number. Preferred mode of communication of complaints will be in electronic medium format (soft copy) and format of the same will be mutually agreed and designed between bidder and the Shrine Board.
- c) Fault diagnosis time: - The bidder will diagnose the fault within one hour on the intimation from the concerned In-charge through its representative and will respond back to concern. However, the bidder shall strive sincerely to rectify the faults at the earliest at their own without waiting for the intimation from Shrine Board officials.
- d) Restoration time: -The bidder will restore the fault within three hours on the intimation from concerned In-charge through its representative.

34. Responsibility of concerned Shrine Board's Engineer Incharge: -

- a) Maintaining of Log Book: - All the concerned Unit Head/Area Head shall nominate the concerned JE or any other suitable staff person in their area for the up-keeping and maintaining of the log book and the nominated person on receipt of complaint will remain in touch with the representative of the bidder till the fault is rectified & corrected and thereafter it becomes his duty to put the entry in the log and to inform his Unit In charge who further will report to the nodal officer. Moreover, the concern Area In-charge shall prepare a log book and generate information for the following columns: -

S. No.	Particular	S. No.	Particular
1.	Location	5.	Down Time
2.	Pre-paid Counter No.	6.	Up time
3.	Date	7.	Break down time.
4.	Type of Fault	8.	Sign of concerned JE/Area In-charge

- b) Submission of periodic reports for Higher Authorities: - All concern Area In charge will submit fortnightly performance report of the system along with photocopy of log book to the central office within the stipulated time.
- c) Penalty Clause: -If the period taken by the bidder for the restoration of the system will exceed than the prescribed period i.e.,24 hours, a penalty of Rs. 1,000/- per hour shall be imposed and if the bidder takes more than 24 hours of time to restore the system then Rs. 2,000/- per day shall be charged with effect from 24 hours of reporting of fault. The penalty amount shall be deducted from earnest money deposited by the bidder.

35. Force – Majeure:

If at any time, during the continuance of this contract, the performance in whole or in part, by either party, of any obligation under this is prevented or delayed, by reason of war, or hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (as are not limited to the establishments and facilities of the contractor), fire, floods, natural calamities or any act of GOD (hereinafter referred to as EVENT) and pandemic like COVID-19 etc., provided notice of happenings of any such EVENT is given by the affected party to the other, within 21 Calendar days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate the this contract, nor shall either party have any such claims for damages against the other, in respect of such non-performance or delay in performance provided the contract shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist. The decision of the Chief Executive Officer, Shri Amarnathji Shrine Board, as to whether the service may be so resumed (and the time frame within which the service may be resumed) or not, shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days either party may, at his option terminate the contract.

36. Arbitration:

- a) In the event of any doubt, dispute or difference of opinion in regard to terms & conditions of the agreement, the concerned parties shall endeavour to settle the same amicably with the SASB through any officer nominated in this behalf. In case, any such doubt, dispute or difference of opinion remains unresolved, the matter shall be referred to the Hon'ble Lieutenant Governor, J&K (Chairman of SASB), who shall

be competent to refer the same to any retired Hon'ble Judge of the High Court of Jammu Kashmir & Ladakh for its resolution. The decision so rendered or award, if any, passed shall govern the rights, duties & obligations of the concerned parties and shall be final. No such disputes shall be referred during the currency of the Yatra.

- b) All questions relating to the arbitration shall be determined in accordance with provisions of the Arbitration and Conciliation Act, 1996 and the amendments thereto and any re-enactment or modification thereof and the rules framed thereunder.
- c) The venue of arbitration proceeding shall be the office of CEO, SASB or such other place as the arbitrator may decide.
- d) Upon any and every reference as aforesaid, the assessment of costs and incidental expenses in the proceedings for the award shall be at the discretion of the Arbitrator.

S. No.	Activity	Date
1	Issuance Date of NIT	19/03/2022
2	NIT document be downloaded from Shrine Board's official website	21/03/2022
3	Last date of Submission of Queries	25/03/2022
4	Pre-Bid Conference	25/03/2022
5	Date of issuance of MoM	___/03/2022
6	Last Date & time for Bid Submission	05/04/2022
7	Technical Bid Opening Date	05/04/2022

Queries may be addressed to: Email: sasbjk2001@gmail.com

**Addl. Chief Executive Officer
Shri Amarnath ji Shrine Board**

OFFICE OF THE CHIEF EXECUTIVE OFFICER,

SHRI AMARNATH JI SHRINE BOARD

Schedule "A" (Technical Bid)

The tenderer shall furnish the following information with documentary evidence wherever required with the Technical Bid. This data shall be submitted without fail in the technical bid only and not otherwise.

Name of the bidder:

S. No	Particulars	
1	Name of the Firm	
2	Registered Address	
3	Phone No(s):	
4	Email id:	
5	Year of establishment and constitution of Firm	
6	Date of registration of the firm. Details of Registration No. of the firm/company. Location of Head Office, Regional Office and Branch Office.	
7	Name, designation, E-mail, Address and direct contact number of the Authorized Representative of the bidder.	
8	Please specify, whether you are submitting your tender as a proprietor of the firm or as partner of the firm or as Director of the company or as a lead member of consortia.	
9	Name of the Proprietor/Partner/ Directors of the tendering firm/company.	
10	Past experience of providing Services in the same filed. Along with the performance certificates (Please enclose testimonials / documentary evidence) as per the requirement in this tender.	
11	Literature/Leaflets on Company profile/Consortia.	
12	Copies of requisite Certificates	
13	List of similar type of projects executed by the agency/Consortia in the past three years and date of having successful completed. Certification of completion from the concerned competent authority in proof thereof.	
14	Operational experience not less than 5 years in similar environment duly supported with documentary proof.	
15	ISO certification or any accredited certification of the firm duly supported with documentary proof.	
16	List of qualified and professional manpower already available with the tenderer in all categories-Managerial, Supervisory and Workers on the ground to handle such jobs, their professional qualifications and experience in the field. (Name of each professional and his qualification to be clearly mentioned in the list to be enclosed)	
17	List of (a) Electronic/electrical gadgets and other equipments available with the tenderer. (b) Back up support on engineering and system's support to ensure hassle free service.	
18	Annual turnover of the tenderer not less than Rs. 2.00 Crore & net worth not less than Rs. 0.5 Crore in any particular year for the last three years as per audited balance sheet a copy whereof to be enclosed. (Proof to be enclosed)	
19	Latest technology and methods employed for RFID tagging, E-surveillance, pre-paid management and implementation of the project.	
20	a) PAN (proof to be enclosed) b) ITR statement/ Income Tax Assessment Order (for the last three years to be enclosed) c) GST registration	

(Copies of documentary proof may be furnished where-ever required. Additional pages may be used, if needed.)

Signature:

Name:

S/o Shri:

R/o:

Contact No:

OFFICE OF THE CHIEF EXECUTIVE OFFICER,

SHRI AMARNATH JI SHRINE BOARD

Schedule "B" (Financial Bid)

Name of the Tenderer:

Description of the work for which tender filled:

Amount of C.D.R. with number and date:

To

**The Chief Executive Officer,
Shri Amarnathji Shrine Board.**

Sir,

I _____ S/o. Sh _____ .

R/o _____ hereby submit my tender for the above-mentioned work along-with the final price (user fee per slip) which shall be charged while booking of the said services: -

Service charge for hiring of Pony/Pithu/Palki
Price in figure:
Price in Words:
The above rates shall remain fixed/ valid for next five years from the date of issuance of work order. The rates shall be inclusive of taxes.

Service charge for UHF tagging of pilgrim
Price in figure:
Price in Words:
The above rates shall remain fixed /valid for next five years from the date of issuance of work order. The rates shall be inclusive of taxes

Service charge for registration / UHF tagging of Services providers			
Price in figure:	Pony, Palki, Pithu	Tent Wala	Langar Wala
Price in Words:			
The above rates shall remain fixed/ valid for next five years from the date of issuance of work order. The rates shall be inclusive of taxes			

The quoted user fee shall be inclusive of all statutory levies and taxes as applicable on the date of submission of the bid. It may also be noted that no variation in user fee shall be permitted during the currency of the contract and the rates mentioned above shall be valid for 05 years.

I affirm that there shall be no liability on the part of Shrine Board and all obligations in respect of any tax, cesses, levies etc. as applicable shall be the sole liability of the bidder/firm.

I further affirm that I have read and fully understood the specifications of the terms & conditions in the tender notice and agree to abide by all the terms and conditions laid therein;

I again affirm that I have read and fully understood the specifications / nature of the job mentioned in the tender notice and agree to abide by all the terms and conditions laid therein, which are being signed in token of my acceptance.

After my offer is accepted, I will execute an agreement with the Shrine Board within the period as may be prescribed by the Board and that I shall also be bound by all such terms and conditions laid therein. If I violate any of the conditions of the agreement, I will forfeit my CDR & the right to continue my operations in the premises mentioned above.

I accept all conditions / provisions contained in the Tender Notice No. _____ dated _____ unconditionally and without any reservations.

Signature:

Name:

Designation:

Date:

Annexure-A

Format for Power of Attorney – For Consortium

Shri Amarnath Ji Shrine Board (hereinafter referred to as “SASB”) has invited Proposals from interested parties for award of the work/project of “---“, vide NIT No. _____ Dated: _____.

Invitation for Tender (hereinafter referred to as Tender Document) document dated: _____.

Whereas, we, (Name & Address of the Lead Member) and (Name & Address of the other Member of Consortium), (hereinafter collectively referred to as “the Consortium”), propose to submit our Proposal in accordance with Tender Document and on being awarded the project/work, to implement the Project in accordance with the terms and condition of the Tender Document and other connected documents in respect of the Project,

And whereas it is necessary under the Tender Document for the members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium all acts, deeds and things, as may be necessary, in connection with the aforesaid Project.

NOW THIS POWER OF ATTORNEY WITNESSETH THAT:

We and (respective names of the members of the Consortium) hereby nominate (Name of the lead member of the Consortium), being one of the members of the Consortium, as the Lead Member of the Consortium, and authorize _____ (Name of the Lead Member) as our constituted attorney in our name and on our behalf, to do or execute all or any of the acts, deeds or things necessary or incidental to the Consortium’s Proposal for the Project, including, inter-alia, submission of Proposal, participating in conferences, responding to clarifications/ queries, submission of information/documents and generally to represent the Consortium in all its dealings with SASB, in connection with the Project until culmination of the process of bidding and thereafter until the Agreement is entered into with SASB.

And we hereby agree that all acts, deeds and things lawfully done by our said attorney, pursuant to this Power of Attorney, shall be construed as acts, deeds and things done by us and we undertake to ratify and confirm all and whatsoever that the said attorney shall lawfully do or cause to be done for us by virtue of the power hereby given.

In witness hereof we have signed this deed on this the _____ day of _____.

Annexure-B

SELF-DECLARATION – NON BLACKLISTING

(On Non-Judicial Stamp Paper of Rs.100/- duly attested by the Notary Public)

To,

Sir,

In response to the NIT No. _____ Dated: _____ for the work/project "-----". I/ We hereby declare that presently our Company/ firm _____ is having unblemished record and is not declared ineligible for corrupt & fraudulent practices in similar services either indefinitely or for a particular period of time by any State/ Central Government/ PSU/Autonomous Body during last three years preceding the date of submission of bid.

We further declare that presently our Company/ firm _____ is not blacklisted and not declared ineligible for reasons other than corrupt & fraudulent practices in similar services by any State/ Central Government/ PSU/ Autonomous Body on the date of Bid Submission during last three years preceding the date of submission of bid.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

Thanking you.

Yours faithfully,

Name of the Bidder: -

Authorized Signatory: -

Seal of the Organization: -

Date:

Place:

Installation material for each Check Point

1. RFID Reader with two Antenna
2. IP55 ODU rack 16 U with 1 32A MCB, 02 FAN
3. 850 VA Ups with 180 Ah battery
4. Masts for hanging RFID readers
5. 15 Mtr RF Cable 04 No.
6. Industrial grade Dual SIM 4G Modem
7. Power Supply Board with 15A 04 Sockets
8. Ethernet Patch Cables 02 No.
9. Controller board

Location of Checkpoints

1. Lakhanpur, Kathua
2. Samba
3. Kunjwani Chowk / Bhagwati Nagar, Jammu
4. Ban Toll Plaza / Jakhani (Up & Down)
5. Nashri Tunnel (Up & Down)
6. Ramban
7. Posana Poonch, Mughal Road (Up)
8. Navyuga Tunnel (Up & Down)
9. Mir Bazar (Up)
10. A1 stop (Down)
11. Sangam (Up & Down)
12. Galander Y Bend (Up & Down)
13. Lasjan (Up & Down)
14. Mattan (Up)
15. Manigam (Up & Down)
16. Bemina / Shadipora (Up & Down)
17. Habak Chowk (Up & Down)

The above lists in Annexure 1 are only indicative and not exhaustive in nature. The actual requirement may vary, which shall be part of the successful bidder's scope of work.

(Note: The bidder shall provide costing of every product/ component).

TECHNICAL SPECIFICATION

Information Technology Infrastructure (Hardware/Network Technology):-

1. Technical Specification of PTP Radio: -

A	OUTDOOR UNIT	<u>Point to Point Topology</u>
		ODU with Support for External Antenna via N-Type Female RF Connector.
		Frequency-Unlicensed Band operating in 5.7 GHz.
		Channel Spacing- 5MHz,10 MHz,20MHz, 40Mhz and 80MHz Channel Spacing Support Software Selectable.
		Output Power –At Least 29 dbm at radio port (as per WPC guidelines).
		TDD Duplexing.
		Dynamic Output Power management.
		MAX Latency of not More than 8Ms and Min 50Mbps throughput full duplex.
		<u>Physical and Electrical</u>
		IP66 Standard Enclosure.
		Max 20-Watt Power Consumption
		ETSI, FCC, and WPC Certification
		Operating Temperature -20 *C to +60 *C
		230V 20% or better, 50Hz AC
		Weight not more than 3 Kg
		<u>Network Support</u>
		QoS Prioritization for Voice, Video, and Data – DSCP/ToS based Classification
		VLAN Tagging and Untagging – 802.1q and 802.1p
		VLAN Management
		Transparent Bridging
		MAC and IP Filtering 10/100 Base T Auto Negotiation Network Connections
		<u>Security</u>
		At least 128 bits AES Encryption
		<u>Management</u>
		Web-GUI, SNMPV2
		Built in Spectrum Scanner
Antenna Alignment Tool		
Backup and Restore the radio configuration		
B	INDOOR UNIT	LAN interface: Ethernet-10/100/1000 Base T interface (IEEE 802.3)
		Environment requirements: IDU operating Temperature - 10 *C to +40 *C
C	MAST	<u>Sturdy Mast 3M with Base Plate</u>
		Sturdy guyed Mast Structure to be modular, the height of the mast can be increased as per the requirement; it should be possible to achieve 10m or more height using mast sections.

2. HARDWARE/ELECTRICAL TECHNICAL SPECIFICATION: -

I. DESKTOP COMPUTER/LAPTOP			
GENERAL	Processor	10th Generation Intel® Core™ i3-4460 processor (6M Cache, up to 3.40 GHz)	
	Operating System	Windows 10 PRO	
	Display	Dell 19 Monitor, E1914H, 18.5 inch VIS, VGA	
	Memory	4GB (1X4GB) Single Channel DDR4 2400MHz SDRAM Memory	
	Hard Drive	Minimum 256GB SSD Hard Drive	
	Video Card	Integrated Graphics included	
	Warranty	3 Year Onsite Service	
	Optical Drive	16X DVD+/-RW drive	
	Form Factor	Small Form Factor	
II. RACK/TOWER MOUNTING SERVERS			
COMPONENTS		SPECIFICATION	
FORM FACTOR	Rack/TOWER		
PROCESSOR	Up to one Intel® Xeon® E-2200 product family processor with up to 8 cores per processor up to 20MB L3cache.		
CHIPSET	Intel C604		
MEMORY	2666MT/s UDIMMs		
MEMORY PROTECTION	ECC, Chipkill (forx4-based memory DIMMs), memory mirroring, and memory bank sparing.		
MAXIMUM INTERNAL STORAGE	2TB 7.2K RPM SATA 6Gbps 512n 3.5in Hot-plug Hard Drive		
OPTICAL DRIVE	One, optional, for models with 2.5"drives. Support for DVD-ROM or Multiburner.		
TAPE DRIVE BAYS	None.		
NETWORK INTERFACES	Four integrated Gigabit Ethernet 1000BASE-T ports (RJ-45); two integrated 10Gb Ethernet ports (10GBASE-TRJ-45or10GBASE-SRSFP+based) on optional 10Gb Ethernet mezzanine card (does not consume a PCI e slot).		
PORTS	Two USB2.0 (three USB2.0 for 3.5" HDD models) and one DB-15 video on front. Four USB2.0, one DB-15 video, one DB-9 serial, one RJ-45 systems management, four RJ-45GbE network ports, two optional RJ-45 or SFP+10GbE network ports on rear. One internal USB ports (for embedded hypervisor).		
POWER SUPPLY	Up to two redundant hot-swap 550 W AC or 750 W AC power supplies (80+Platinum certification), or 750 W DC power supply options.		
HOT-SWAP PARTS	Hard drives, power supplies, fans.		
SYSTEMS MANAGEMENT	UEFI, Integrated Management Module2 (IMM2), Predictive Failure Analysis, Light Path Diagnostics, Automatic Server Restart, Systems Director and Systems Director Active Energy Manager, Server Guide. Optional Advanced Management Module Advanced Upgrade (FoD) for remote presence (graphics, keyboard and mouse, virtual media).		
SECURITY FEATURES	Power-on password, administrator's password, Trusted Platform Module (TPM).		
VIDEO	Matrox G200 e R2 with 16MB memory integrated into the IMM2. Maximum resolution is 1600x1200 at 75Hz with 16M		

		colors.
	OPERATING SYSTEMS SUPPORTED	Microsoft Windows Server 2012 R2, 2012, 2008 R2 and 2008, RedHat Enterprise Linux 5 and 6, SUSE Linux Enterprise Server10and11, VMware ESX4.1 and VMware ESXi4.1 embedded hypervisor(E5-2600only), VMware v Sphere (ESXi)5.0and5.1.
	LIMITED WARRANTY	Three-year customer-replaceable unit and onsite limited warranty with 9x5/NBD.
	SERVICE AND SUPPORT	Optional service upgrades are available through Service Pacs @:4-houror2-hour response time, 8 hours fix time, one-year or two-year warranty extension, remote technical support for hardware and selected and third-party (Microsoft, Linux, VMware) software.
	DIMENSIONS	Height: 43mm (1.7in), width: 429mm (16.9in), depth: 734mm (28.9in)
	WEIGHT	Minimum configuration :12.7kg (28lb), maximum: 15.9kg (35.1lb)
III.	TRANSMISSION RACK	
	<ul style="list-style-type: none"> ✓ Cormack 42U Server Racks 600 mm Width x 1000 mm Depth With Front Glass Door ✓ Back Steel Door/ Side Detachable Panels/ Wheels ✓ Fan Housing Unit 4 Fan ✓ Keyboard Tray Sliding and Rotary ✓ Monitor Shelf ✓ Additional Equipment shelf ✓ Cable Manager Horizontal ✓ Power Strip 12 Socket 5 Amp ✓ Mounting Hardware 	
IV.	ROUTER	
	<ul style="list-style-type: none"> ✓ Integrated Services Router with 4 small form pluggable Gigabit Ethernet port. ✓ Circuit-speed WAN performance up to 1 Gbps with services. 	

3. NETWORK DEVICE TECHNICAL SPECIFICATION: -

S. No	Access Switch 24-Port
	Performance and Scalability
1	The switch should have minimum of 24*10/100/1G Ethernet Ports and 6*1/10G or better Uplink Ports in 1 RU fixed Form Factor
2	The switch should support minimum of 30W (802.11at) on all the ports
3	Switch should have non-blocking architecture and should work at line rate.
4	Switch should have field replaceable power supplies and FAN trays
5	Switch should Provide persistent/constant PoE power even when switch is under maintenance
6	Shall support modern modular operating system designed for scalability and reliability
	L2 Feature
7	Shall support up to 16K MAC.
8	Spanning Tree Protocol (IEEE 802.1.D, 802.1W, 802.1S)
9	Switch should support VLAN Trunking (802.1q) and should support 4096 VLAN
10	Switch should support basic Multicast IGMP v1, v2, v3
11	Shall support Rapid Per VLAN Spanning Tree (RPVST+)

12	Shall support 64 Link Aggregation Groups (LAG)
13	Shall support 64 ports active/active layer2/Layer3 multipathing redundancy
14	Shall support Port Mirroring
15	Shall support Jumbo Frames 9216 Bytes
16	Shall support 802.1AB Link Layer Discovery Protocol (LLDP)
	Network security features
17	The switch should support IEEE 802.1x providing user authentication, authorization and CoA.
18	The switch should support SSHv2, SNMPv3, TACACS+ and RADIUS
19	The switch should support MAC address notification to allow administrators to be notified of users added to or removed from the network.
20	Switch should support Ingress ACL Scale of 4k or better.
21	Switch should support real time data collection with sflow / netflow.
	Quality of Service (QoS) & Control
22	The switch should support 8 egress queues per port to enable differentiated management
23	The switch should support Standard 802.1p CoS field classification and Differentiated services code point (DSCP) field classification
24	The switch should support Rate Limiting function to guarantee bandwidth
25	Switch should support IEEE 1588/NTP
	Operation and Management
26	Switch should have dedicated management port and USB ports to upload configuration files and image
	Management and Troubleshooting
27	Switch should support telnet, ssh, https, SNMPv3, configuration rollback feature for ease of management
28	Switch may support API Driven configuration and support Netconf and Restconf using YANG data model. It may support automation tool like python
28	Switch should support port mirroring based on Inbound & outbound, mirroring based on ports, vlans.
29	Switches need to be provided with all software license from day-1 as per RFP specification
30	Switch should support telemetry

OUTDOOR UHF Reader Specifications	
Frequency	902 MHz - 928 MHz, 865 MHz - 868 MHz
Transmit Power Output	0 dBm to +33.0 dBm: PoE+, 24V External DC, Universal 24 VDC Power Supply; 0dBm to +31.5dBm: PoE, 12V External DC (4-port-models only), 24V External DC, Universal 24 VDC Power Supply
Communications	10/100 BaseT Ethernet (RJ45); USB Host & Client (Type A & B); Serial (DB9)
Power	POE (802.3af) POE + (802.3at) + 24VDC (UL Approved)
Antenna Ports	4: 4 monostatic ports; (Reverse Polarity TNC) 8: 8 monostatic ports; (Reverse Polarity TNC)
Dimensions	encapsulated model W: 49 H: 49 D: 10 mm, Desktop model W: 95 H: 78 D: 24 mm
Dimensions (mm)	10.75 in. L x 7.25 in. W x 2.0 in. D 27.3 cm L x 18.4 cm W x 5.0 cm D
Housing Material	Die-cast aluminium, meets IP53 standards
Weight	Approx. 4.4 lbs/2.13 kg
Visual Indicators	Multicolor LEDs: Power, Activity, Status and Applications
Processor	Texas Instruments AM3505 (600 MHz)

Memory	Flash 512 MB; DRAM 256 MB
Operating System	Linux
Firmware Upgrade	Web-based and remote firmware upgrade capabilities
Management Protocols	RM 1.0.1 (with XML over HTTP/HTTPS and SNMP binding); RDMP
Network Services	DHCP, HTTPS, FTPS, SFPT, SSH, HTTP, FTP, SNMP and NTP
Network Stack	IPv4 and IPv6
Security	Transport Layer Security Ver 1.2, FIPS-140
API Support	Host Applications — .NET, C and Java EMDK Embedded Applications — C and Java SDK
Operating Temp.	-4° to +131° F/-20° to +55° C
Storage Temp.	-40° to +158° F/-40° to +70° C
Humidity	5-95% non-condensing
Sealing	IP53

PTZ Camera Specification
<ul style="list-style-type: none"> • 1/2.8" 2Megapixel STARVIS™ CMOS • Powerful 25x optical zoom • Starlight technology • Max. 25/30fps@1080P • IVS • Support PoE+ • IR distance up to 100m • IP66

Technical Specification of Network Video Recorder
<ol style="list-style-type: none"> 1. System: Main Processor Industrial-grade embedded processor 2. OS Embedded Linux: Operation Interface Web/operating in local GUI
Perimeter Protection by Camera
<ol style="list-style-type: none"> 3. Performance: 8 channels 4. AI Search: Search for pictures by channel, time and event type
Face Detection by Camera
<ol style="list-style-type: none"> 5. Performance: 4 channels 6. Face Attributes: 6 attributes: Gender, age, glasses, expression, mouth, mask, and beard 7. AI Search: Search for pictures by channel, time and face attributes 8. SMD Plus by Camera 9. Performance: 12 channels 10. AI Search: Search by target classification (human, vehicle)

Video	
11. Access Channel	: 16
12. Network Bandwidth	: Access: 160 Mbps; Storage: 160 Mbps; Forward: 64 Mbps
13. Resolution	: 8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1
14. Decoding	: Capability 8 x 1080p@30 fps
15. Video Output	: 1 x VGA output, 1 x HDMI output, supports simultaneous video sources output for VGA and HDMI
16. Multi-screen Display	: 1, 4, 8, 9, 16 views
17. Third-party Camera Access:	ONVIF; RTSP
Compression	
18. Video Smart:	H.265/H.265/Smart H.264/H.264/MJPEG
19. Audio:	PCM/G711A/G711U/G726/AAC
20. Network/Network Protocol:	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; DDNS; FTP; Alarm Server; IP Search (Support Dahua IP camera; DVR; NVS; etc.); P2P; auto register
21. Mobile Phone Access:	Android; iOS
22. Interoperability:	ONVIF (profile T/S/G); CGI; SDK
23. Browser:	Chrome; IE9 or later; firefox
Record Playback	
24. Multi-channel Playback:	Up to 16 channels for playback
25. Record Mode:	Manual record; alarm recording; SMD recording; smart recording
26. Storage:	Local HDD; network
27. Backup:	USB storage device

Desktop UHF Reader
Colour - Multicolour
Item Height - 10 Millimeters (approx.)
Item Width - 6.8 Centimeters (approx..)
Product Dimensions - 10.4 x 6.8 x 1 cm; 158.75 Grams (approx.)
Voltage - 5 Volts
Item Weight - 159 g (approx..)
Interface - USB/Micro USB
Work Frequency - Standard ISM 865-867 MHz (IND), 865-868 MHz (EU),
Interface Protocol - ISO18000-6B, EPC Class 1 Gen2 (ISO18000-6C)
SDP - Provided DLL and Demonstration Software Source code to Facilitate Further Development
Reading Rate - Software Programmable
Operating Mode - Answer
Frequency Hopping - FHSS

RFID UHF Antenna
Polarization - 1 x Left-hand circular / 1 x Right-hand circular
Dimensions - 575.1 mm x 259.1 mm x 33.52 mm/ 22.6 in. x 10.2 in x 1.32 in. (approx.)
Connector - Dual N-Type Female
Connector Location - Rear
Mounting Options - Mounting studs provided
Weight - 7.0 lbs /3.2 kg (approx.)
Casing/Materials - UV Stable ASA
Frequency Ranges - EU: 865 – 868 MHz US: 902 – 928 MHz*
3 dB Beam Width - 70° in both planes
Maximum Power - 10 Watts
Axial Ratio - 1 dB typical
Operating Temperature: -30° to +70°C/-22° to +158°F

Storage Temperature: -40° to +85°C/-40° to +185°F
 IP Sealing - IP67
 Vibration - MIL-STD-810G, Method 507.5, Procedure II – Aggravated, IEC-68-2-6 (10 to 150 Hz, 0.5g, one hour in each of two axes – random vibration)
 Humidity - IEC-68-2-30 (-25° to +40°C / -13° to +104°F) 24 hour cycles of 90% relative humidity

RFID UHF Card

Operating frequency: EU: 866-868MHz
 Protocol: ISO/IEC 18000-6Ccompliant
 Chip type: alien/Impinj/NXP
 Memory: chip dependent
 Material: PVC
 Thickness: Approx 760 Micron
 Size: CR80 (54mm x 86mm) (approx.)
 Personalization: As per customer requirement
 Mounting: Hole or lanyard
 Dimension: L86 x W54 x T1.8mm (approx.)
 Weight: 9g +/- 0.5g (approx.)
 Standard Colour: White Hard
 Shell: ABS 4 Layer
 Card: Matt/Glossy Finish

Windshield UHF Tags

Operating frequencies - EU: 865 – 868 MHz US: 902 – 928 MHz
 Tamper proof - A tamper-evident option with strategically placed slits in the label
 Reading range - IN: Up to 10 meters* (32 ft)
 Writing range - IN: 2-3 meters* (9 ft)
 Dimensions - 100 mm X 50 mm (approx.)
 Adhesive - 3M Adhesive
 Programmable data field - According to EPC Gen 2, ISO 18000-6C, 96 bits
 Colour - White
 Chip - Alien/NXP/Avery
 Numbering Options - Serialized/Barcode
 Environment : -25 °C (-13 °F) to +80 °C (+175 °F)

Industrial 4G Router

Number of antennas	2 (MAIN + AUX)
Connector	SMA female
SIM	2 (3 V & 1.8 V)
Number of ports	2 x 10/100 Mbps, 2 x LAN or 1 x LAN + 1 x WAN
WAN port	Supporting 802.3 at PD feature (optional)
Magnet isolation	1.5 KV
WiFi Interface (Optional)	
Number of antennas	2 (WiFi1 + WiFi2)
Connector	RP-SMA male
Standards	802.11b/g/n, supporting AP and Client modes
Frequency bands	2.4 GHz
Security	WEP, WPA, WPA2
Encryption	64/128 AES, TKIP
Data speed	2*2 MIMO, 300 Mbps
RF output power	802.11b 19 dBm
Receiving sensitivity	802.11b -93 dBm
Others	
Reset button	1 x RST
LED indicators	1 x RUN, 1 x PPP, 1 x USR, 3 x RSSI
Built-in	Watchdog, Timer
Network protocols	PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP,
VPN tunnel	IPsec, OpenVPN, GRE
Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/
Management	Web, CLI, SMS

Serial port	Transparent, TCP Client/Server, UDP,
Connector	3-pin 3.5 mm female socket
Input voltage	9 to 36V DC
Power consumption	Idle: 100 mA@12 V
PD feature* (optional)	WAN port supported
Ingress protection	IP30
Housing & Weight	Metal, 305 g
Dimensions	127.5 x 82.5 x 29.5 mm
Installations	Desktop, wall mounting and 35 mm DIN rail
Regulatory and Type Approvals	
Regulatory:	RCM, CE, CCC, EAC, FCC, PTCRB
Application	E-mark (Vehicle)
Environmental:	RoHS, WEEE

The technical specifications in Annexure 2 are only indicative and not exhaustive in nature. The actual requirement may vary, which shall be part of the successful bidder's scope of work.