Request for Proposal (RFP)

(RFP No – 1/2019 dated March 8th, 2019)

REQUEST FOR PROPOSAL (RFP) FOR SETTING UP OF GIS / IMAGE PROCESSING LAB

FOR

NAGALAND FOREST MANAGEMENT PROJECT (JICA Funded)

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➢ *(One can use this e mail for any clarification/questions)*

Nagaland Forest Management Project Society (NFMPS), for its Nagaland Forest management Project (NFMP) - funded by Japan International Cooperation Agency (JICA) - proposes to set up and operationalize a GIS cum Image Processing Lab at the Project Management Unit (PMU) office and the Divisional Management Units (DMUs) offices with a view to facilitate decision making and strengthening the Monitoring and Evaluation protocol of the project.

The Project Management Unit (PMU) thus solicits technical and financial proposals, *in prescribed format only,* for the requirement from eligible firms/organizations. Sealed RFPs, supported with requisite documents, may be submitted [along with Demand Draft of Rs. 1,000/- (Rupees one thousand only) as non refundable Tender fee and Earnest Money Deposit (EMD) of Rs 5,00,000/-(Rupees Five Lakhs only) in favour of Nagaland Forest Management Project Society payable at SBI Kohima so as to reach this office on or before 3.00 pm on 28th March 2019.

Important Dates:

The schedule of the process will be as under:

Date	Time	Event
March 13, 2019		RFP issue date. Sale of RFP Documents starts the next day 10 AM onward (against payment of Rs 1000/-) at the O/o the PCCF, Forest Colony, Kohima
March 20, 2019		Clarifications, if any.
March 28, 2019		Last date and time for submission of proposals (Technical and Financial) with EMD & Tender fees
March 29, 2019		Opening of Technical Bid & Evaluation
April 5, 2019		Technical Presentation (Eligible Technical Bidder)
April 5, 2019		Opening of Financial Bid
TBD		Anticipated award date

1.   Overview

The main objective of the project is to improve livelihood of the people and conserving the biodiversity by bringing current and fallow jhum areas under forestry and conservation practices. For this, different intervention models have been proposed, supported with income generating activities *etc.* In this regard a GIS and Image interpretation lab shall be set up for collection, assessment and interpretation of geospatial data for selection of interventions and monitoring the impact of the interventions.

The setup shall be such that project officials at different levels are able to access and query the geospatial database to assess different parameters for monitoring or interventions as and when required, while the officials at DMU level (11 nos.) are also able to upload data such as GPS shape files, pictures, videos *etc.* from fields level (both online or by sending in a CD/Thumb drive to the PMU) while also giving them access to the data for decision making and monitoring. Some other parameters shall be monitored using the Management Information System (MIS) which shall also have interface with the GIS.

2.   Deliverables
Part A : Software & application component including installation and operationalisation of the same)

Sl.	Description	Qty
1	Image Processing Software (COTS)	2
2	GIS Software (COTS)	2
3	Enterprise /Server Engine GIS software (COTS)	1
4	Anti Virus Software (8 yr license for all)	Lump Sum
5	Custom Modules – as specified in the RFP (liable to change subsequently)	Lump sum
6	Extended warranty for three years (after 1 year compulsory warranty on Sl. No 1 -4)	Lump Sum

Part B : Hardware including installation, connections/networking and Operationalisation

1	High End Server	1
2	Mid Range Workstation	3
3	Plotter	1
4	Large Format Scanner	1
5	A3 Colour Printer	1
6	Document Scanner	1
7	Online UPS/Power Back up system	1
8	High End Hand Held GPS Devices	1
9	Mid Range Hand Held GPS Devices	55
10	LED TV (55 inch) – for use as large monitor at times 4 K res.	1
11	Switch and Firewall (manageable)	1+1

12	System set up and integration	LS
13	Extended year warranty for three years apart from OEM warranty (Sl. No. 1-11)	Lump Sum

NOTE:

- **Total price will be calculated as a Grand total of Part A and B.**
- **Bidder must bid all the items.**
- **The software shall be such as to make full use of the hardware capability.**

3.   Technical specification for Software

3a):   Software specification for Image Processing

Sl No	Specifications	COMPLIANCE with Proof via (Brochure / weblink / Screenshot)
1	Should have geographical connectivity of files across multiple views opened in a single UI.	
2	Should support for raster formats like XML, ECW, MrSID, img, tiff, jpeg, shp and other image and GIS data formats should be present; GeoTIFF, JPEG2000, , TIFF, Sensor Support: Cartosat, IRS (fast & super structure), ResourceSat-1 (Fast & Super Structured), ResourceSat-2 (HDF5), EO-1 ALI (HDF4), Landsat 8 (OLI & TIRS), Landsat, Sentinel-2, QuickBird, Worldview 1 – 2 & 3, GeoEye, IKONOS, ALOS AVNIR, ALOS PRISM, ASTER, SPOT-(5,6,7)PB, RESOURCESAT RPC, ALOS RPC, WORLD VIEW RPC, RAPIDEYE.	
3	Should have integrated 2D, 3D, and profile viewing of point clouds; extraction of DTM and DSM from point cloud data; RGB-encode, edit, filter, merge, and split point cloud data.	
4	Should support virtual mosaic of imagery; Image stitching utility with seam line and colour correction facility; colour correction facility should have more than one algorithm like image dodging, illumination equalization, colour balancing etc. and should offer automatic and manual mode of correction. Should support direct read of Sentinel-2 data in the software. The software should support direct read of WorldView-4 imagery from Digital Globe, including the ability to orthorectify the imagery.	
5	Fast Polynomial rectification of images; single frame Ortho-rectification of images based on orbital push broom and RPC model.	
6	Should have Batch processing facility; Parallel batch processing facility;	
7	Should support different customized band ratio; software should have the facility to modify all indices based on requirement. The software must have separate hyperspectral Image processing tools like anomaly detection, target detection, material mapping etc. along with spectral comparison facility.	
8	Should support creation of rule based classification tree and its execution and material of interest based subpixel classification. The software must have facility for Supervised and unsupervised classification. Classification algorithms based on machine learning should be supported in the software. The software should support Live-link with Google Earth Pro for cross checking the ground reality.	
9	Should support graphical spatial modeling using different raster and vector operator in the same graphical user interface. Should have nearest neighbor based Pan-Sharpen techniques available in spatial model. The software should support atmospheric correction.	

10	Should have Beta naught, sigma naught, despeckle and real time enhancement for RADAR data; real time water mapping from RADAR data and colour coding. Should have Sensor Independent Complex Data (SICD) support.	
11	Should support Real time preview and manipulation of geophysical data like: Dedicated ASTER data processing wizard should be present. Should have additional option for false-color display band combination for Landsat 8 and WorldView-3 imagery, etc.	
12	Must have edge enhancement and convolution option for RADAR data. The software must have tool to detect incidence angle and look direction of RADAR scene.	
13	Should have feature based and grid based change detection technique from high resolution data. Should be capable of opening an image based on algorithms and dynamic changes must be seen while changing the histogram parameters.	
14	Should be able to detect changes based on probability, zone, addition, subtraction and combination of both.	
15	Should have semiautomatic georeferencing and edge matching tool for satellite images.	
16	Should have radiometry and algorithm-based change detection tool with automatic raster to vector conversion facility.	
17	Should be able to view DTM as 3D surface; Should have drape facility of raster, vector and annotation on 3D surface; should have facility of fly through over 3D.	
18	Should be capable of ortho-rectification of RADAR images and extracting DTM from stereo RADAR imagery.	
19	Software should be from reputed manufacturer with wide user base. Supplier should provide tender specific Manufacture's Authorization for the proposed software from OEM.	

3b): Software specification for GIS Software

Sl. No.	SPECIFICATIONS	COMPLIANCE with Proof via (Brochure / weblink /
1.	Should have RDBMS Read Write Support for Access, SQL Server, Post GRES, SQL, Oracle etc. or intermediate connecter/converter and export to Shape File (.shp), dwg, dxf, KML, KMZ etc.	
2.	Should support OGC data services like WCS, WMS, WFS etc. Software should integrate with web data source in OGC format for displaying Geospatial data in the native viewer.	
3.	Should have support to keep different vector geometries like Line, Point and polygon as a single layer (feature class) or should have Multilayer Facilities. Should have editing facilities.	

4.	Create Polygons from Lines or Create Lines from Polygons, interconversion facility among different feature types, attribute to text and text to attribute	
5.	Should have tools to read and export different raster data format, img, tiff, geotiff, JPEG 2000 etc	
6.	Should support tool for raster data registration with manual georeferencing can be applied to any raster data by using-Affine, Polynomial, Rubber sheeting methods etc.	
7.	Should have inbuilt coordinate conversion tool.	
8.	Should support image classification tools - K-Mean etc. or algorithm based classification tools and grouping, recode, Thiessen polygon, Clump, Hotspot Detection etc.	
9.	Should have basic enhancement capabilities for better visualization of satellite images like-statistics calculation, simple brightness/contrast tools, linear adjustments, photography enhancements, full graphical histogram contrast adjustment tool, etc.	
10.	Capable of opening multiple layers with different projections and datum in a single viewing window (On the fly projection) without giving error notifications.	
11.	Should have visual change detection tools for any data types like: Swipe/Flicker or Transparency Control.	
12.	Bulk attribute Update using Expression, Support Queued Edits, Maintain relationships or coincident geometry digitization and editing	
13.	Automatic Validate Geometry attributes and Fix Geometry, Validate Connectivity using All advanced editing capabilities.	
14.	The solution should have option for Attribute Query, Spatial Query, Join, union, intersection, Buffer Zone (Merged and Unmerged), Analytical Merge, Analyzing Geometry, Native Query, Functional Attribute, Update the analysis dynamically as data changes for faster QA/QC of Vector data.	
15.	Software should offer geospatial analysis option, such as corridor planning, shortest path between two or more points based on distance cost, terrain, or other attributes, best site selection [Weighted overlay analysis], terrain processing, viewshed, line- of-sight depictions, and watershed analysis.	
16.	Proposed software should support interpolation method like IDW, Ordinary Kriging, Simple Kriging, universal kriging, Spline, Triangulation, etc. Software provides capability of ordinary Kriging Suite to perform exploratory analysis and visualization of data as graphs to understand the input data for anisotropy, Semi-variogram, Covariance, Correlogram, General Relative Semi Variogram, Pairwise Relative Semi-variogram, Sill.	
17.	Proposed software should be able to generate elevation artifacts from raster based elevation sources, Aspect, Slope, Grade, Isolines or Contour, Contour labelling, Curvature, Volume, Viewshed, Isoline, Update Geometry Z Value	
18.	Proposed software should have following Visualization option Overlay, Colour composite, Blending, Shaded Relief.	
19.	Should Support DEM perspective views on platforms supporting OpenGL, Rendering of DEM or any surface information as a 3D view.	

20.	Image perspective view of image drape over DEM from user defined position. Control vertical exaggeration for 3D view	
21	Software should be able to generate attribute base animated symbols	
22.	Software should be from reputed manufacturer with wide user base. Supplier should provide tender specific Manufacture's Authorization for the proposed software from OEM.	
23.	Software should capable of joins and relationship of table.	
24.	Software should integrate with web-data source in OGC format and other industry standard RDBMS sources like Oracle, PostGres and SQL Server directly without using any other underlying software for displaying geospatial data in the native viewer	
25.	Should have raster analysis option like algorithm based classification, grouping, recode etc.	
26.	The solution should have option for more than one layout frame, grid display, grid snap, map book generation, batch plotting	
27.	The solution should have option to create map layout using more than one map window in both static and dynamic mode	
27.	Should have hydrological features like, fill depressions, Downhill path, Downhill Accumulation, Flow Concentration, Sub-basin delienation, etc.	
28.	Create DEM from line and point data with interpolation method like IDW, KRIGGING & TIN, using Z factor and resolutions.	
29.	The solution should have surface analysis tools like, create isoline, isoregion, slope, aspects, profile graph, hill shade and view shade etc.	
30.	Should be able to view LiDAR data by classification, elevation, return, RGB, and intensity, Define colours and gradients, link 2D and 3D views, clip to 2D extent and follow 2D, 3D terrain offset, change Z scale and point size, 3D views in perspective mode or as a TIN surface	

3c): Customised Modules

As per the project scope and requirements, bidders need to develop following web GIS modules which will also be integrated with MIS and hence should have ability for integration for the same

i)   Jhum Rehabilitation/Plantation Monitoring Module:

A plantation monitoring module is needed for identification and quantification of change – both temporal and spatial – on the ground using satellite imageries or drone data or nay other Ariel data. The module should also support uploading and display of time lapse/ time series pictures and videos from the uploaded data and, be able to organize and graph the related data such as area, perimeter, dates, cost *etc.* for the area under consideration.

A mobile application version (android only) is also required – with a very simple interface so that the lowest staff is able to use it - wherein the field staff can upload plantation data along with pictures/videos and other related parameters at various time intervals for monitoring purpose. Audit trail is to be maintained for these plantation records to analyse the effectiveness of plantation.

- ✓ Field data collection based on in-built GPS for spatial information (points, lines, polygons etc.), from predefined customizable forms for attribute/non-spatial data and from in-built cameras and mobile phones for multimedia data (photographs). Data collected would be stored on the device and submitted to the server based on internet availability. The geographic information thus captured would also be rendered on the map screen.
- ✓ Visualization of local vector spatial data as styled maps on the device along with calculation of various parameters like length, area, slope *etc.* Attribute information for the map data would be displayed on selection of map features.
- ✓ Real-time submission of field data to the central servers based on predefined data flow procedures using mobile data networks and Wi-Fi.
- ✓ Retrieval, storage and updating of spatial and non-spatial information from central server using mobile data networks and Wi-Fi. The retrieval mechanism would be able to distinguish between new data and data already available on the device, in order to fetch only the new data.

ii)   Web Geoportal Module:

This module will form the backbone of interconnectivity between various users and enable real-time online access to information to all the users using login id and password wherein different users can have different level of accesses to the data depending on their requirement. Further details can be provided during discussion. It shall inter alia also include:

- ➤ Dynamic view of all plantation records, along with field parameters and photographs, it will have provision to upload GPS points, pictures, videos, etc.
- ➤ A dynamic query module integrated with a dashboard view to be provided on top of these plantation records, with an overlay analysis with other forest boundaries and spatial layers.

iii)   Change Detection Module:

It can be built separately or combined with (i) above. The main task will be to perform on demand server side geoprocessing based on multi temporal imagery data, and churn out a customised report based on parameters provided by the department. The module needs to be integrated with the geoportal and MIS.

- ➤ Forest Cover Change - How the overall forest cover has changed in a given project site/village/ range/division.
- ➤ Slider &chart based change understanding for forest plantation impact.
- ➤ Forest Density Change - How the overall Forest Density has changed in a given project site/village/range/division.

➢ Creation of master catalogue of all spatial and non-spatial data like reports and photographs:

    a. File based Vector datasets
    b. Satellite Imageries / other Raster datasets
    c. Flat Db tables with MIS information
    d. Reports in PDF/ Word format
    e. Photographs with location information in Metadata
    f. Video Files

iv) Module on Income Generating Activities (IGAs), Infrastructure Creation and Joint Forest Management:

➢ Enable geospatial monitoring of location and impact of activities which shall emanate from IGAs.
➢ Geotagging of JFMC/ NGO activities, which will be made available via portal.
➢ Asset information for community works like Watch Tower, Water Harvesting Structures in forest, Infrastructure Development *etc.*
➢ Asset information for Departmental Works like construction of office building, guest house, *etc.*

ENTERPRISE GIS SERVER ENGINE SOFTWARE SPECIFICATIONS TO HOST SPECIFIED WEB BASED MODULES

S.No	SPECIFICATIONS for Enterprise GIS Server Engine Software	COMPLIANCE with Proof via (Brochure / weblink / Screenshot)
1.	Software should be from reputed manufacturer with wide user base in India and abroad in forestry sector. Supplier should provide tender specific Manufacture's Authorization for the proposed software from OEM.	
2.	Software should be able to create a catalogue for all spatial and non-spatial data (MIS data, images, word files) and serve it, so that it can be accessed through deployed web applications or desktop applications. It should also be able to catalogue OGC compliant third party web services such as Forest Fire incidents from MODIS. The end user must be able to query this content based on footprint or metadata keywords, once retrieved the user must be able to download desired content.	
3.	The server application should also be able to catalogue all the datasets stored in different spatially aware databases like Oracle, Sql Server and Postgres(Post GIS) and make them available in an index to the client. It is anticipated to leverage Postgres with PostGIS for GIS MIS application.	
4.	It should be possible to catalogue geo tagged photographs relevant to forest department in the central catalogue, wherein	

	the system should be able to automatically read the lat, long information stored in the exif metadata of the jpeg photographs.	
5.	Software should have option to publish new web services to share the forest department data in formats of WFS, WFS-T, WMS, WFS-G and WMTS. Large volumes of mosaicked imagery data should also be streamed by using compressed protocol, to increase display performance.	
6.	Software should have option to create a Spatial Drop Box. It will allow users to share their data with other users. This feature creates listeners on directories to automatically find new incoming raster, vector and multimedia files. When a file is added to an input folder, the drop box determines if it is a file of interest.	
7.	Software should have option to serve imageries in format to download them by defining area of interest like Web Coverage Service. Also, the system should support clipping and/or downloading of raster and vector data by authorized users in web application.	
8.	Performing analysis over the published data is essential. There is a requirement to design, develop, and deployment of a dynamic query builder based natively on Spatial Database, wherein the user should be able to perform multilayer multi parameter spatial and non-spatial queries.	
9	Software should include techniques to change band combinations of satellite data, change brightness and contrast, generation of pyramids, footprint generation, on the fly dynamic mosaicking to enable better understanding of the image by users.	
10.	Aid users for understanding changes in land use pattern over specific timespan. Software should have option like Time Slider on web application. Using the time slider, data can be used to understand the plantation effects.	
11.	Software should be able to create and deploy web GIS applications using software by authorised users without writing codes. It should have facility to change, configure and select from different templates to customize GUI.	
12.	Software should be able to on the fly transform and reproject among different projection systems and display the data over web application.	
13.	The system must have perpetual license and license should be for 24 cores of the physical servers.	
14.	The system should be able to support industry-standard data types, industry-standard data formats, unlimited file size or database size, unlimited number of files or tables, and unlimited number of users.	
15.	There should be a free tool without any extra licensing limitation that will allow authorised users to upload new data along with its	

	required ancillary information (metadata). The Metadata standards prescribed in ISO 19115 / 19139 should be used. It should be able to connect into spatial data natively from Oracle locator, Sql Server Spatial and PostGIS simultaneously without any additional license implication and upload data.	
16.	Different types of spatial models like Normalized Differential Vegetation Index for understanding vegetation quality, Moisture Stress Index for understanding harsh weather effects on moisture and several other forestry significant models could be created. These models can be published over the web as WPS service, so that users can run it and extract important information.	
17.	Software should have option to publish spatial models to generate contours, slope, aspect of the terrain, hillshade. Also, the outputs generated from the process should be downloadable.	
18.	The software should have facilities to integrate security. The proposed solution should secure data depending on the following parameters like spatial extent, scale, data, type of user. Also, administrator can set permissions and users.	
19	Software should have facility to integrate several types of base maps like Google Maps, Bing Maps, and Open Street Maps as a reference.	
20.	The Proposed software must be compliant to open standards for easy integration and sharing, such as OGC. OEM should provide OGC certificates for Catalogue Service Implementation Specification, Version 2.0.2; Web Coverage Service Implementation Specification, Version 1.0.0; Web Feature Service Implementation Specification, Version 1.1.0; Web Map Service Implementation Specification, Version 1.3.0.	
21	Enterprise Server software must have capability to carry out on the fly mosaic of multiple satellite image , department would download multiple satellite image from free available source	
22	Enterprise Geospatial software solution which is going to be implemented by the bidder, should have been implemented in at least five state Govt. Forest dept / GOI forest Department. Supporting Ref order should be attached	

4. **Specifications for Hardware**

   4a): High End Server for GIS Server Engine & Application Hosting

Form Factor	5U Tower Server
Processor	Processor Core Per CPU should be Minimum 16(sixteen) Core. The Frequency should be minimum 2.1 GHz or higher. Processor should

	be latest Intel series/generation for the server model being quoted. The Server should scalable up to 4 processors.
Min No of Processors	16 CORE
RAID Controllers	RAID 1, RAID 0
Min RAM	64 GB ECC DDR4 6 DIMMs expandable to 192 GB
HDD	1x3 TB HDD SAS, Expandable up to 16 TB
Remote Management	Yes
Warranty	3 Years Seller Warranty
No of Lan Ports	04
Operating system	Windows Server 2016 Enterprise
Ethernet Technology	Minimum dual Port 1 GB Gigabit Ethernet
Number of Power Supplies Installed	2
Maximum power supply	800W

4b): Workstation for Desktop GIS and Image processing software

Form Factor	Tower (5U rackable)
Processor	Intel® Xeon® processor E5-2630 v3
Min No of Processors	08
Min RAM	32GB DDR4 expendable up to 64 GB
HDD	2X1 TB HDD SATA (Up to 4 total SATA HDDs)
Raid Support	RAID 0, 1, 10
I/O slots	Support for up to total of 6 full-height PCIe 3.0 slots
RAID controllers	Support for a maximum of 1 internal controller and 1 external controller

Warranty	3 Years Seller Warranty
I/Os	4 USB 3.0, 2 USB 2.0, 2 PS/2, 1 RJ-45 (NIC), 1 Audio Line-In, 1 Audio Line-Out.
Operating system	Windows Pro 10 (64 bit)
Networking and Communications	Integrated Intel I218LM PCIeGbE Controller, Intel Ethernet I210-T1 PCIe NIC
Number of Power Supplies Installed	1
Maximum power supply	750W PSU
Monitor/Displays	27-inch IPS LED Backlit Monitor
Graphics	NVIDIA/Radeon latest 8 GB Graphics (Support at least 2 or more port for display)
Optical and Removable Storage	Multi DVD Writer

4c):Large Format Printer (Plotter)

Printer Type	42" large-format printer - ink-jet –color
Media Size	11-42"
Media Weight	70 g/m2 - 328 g/m2
OS Required	Microsoft Windows 7/8/10 (32/64 bits)
Processor Type	Intel/AMD
Processor Speed	1 GHz
Min RAM Size	1 GB
Min Hard Drive Space	2 GB
Inkjet Technology	Thermal Inkjet
Ink Palette Supported (Colors)	6-ink - cyan, magenta, yellow, pigment matte black, dark gray, gray (CISS preferable)
Technology	ink-jet
Print Speed	min 1200 sq.ft./hour

Connectivity Technology	wired
Interface	USB, Gigabit LAN
Connector Type	4 pin USB Type B, RJ-45
Power supply	AC 120/230 V, 50/60 Hz
RAM	1 GB or more
Energy certified	Required
Printing resolution	2400x1200 or more
Support	1 year warranty

4d):Large Format Scanner

Scanner type	CCD scanning technology
Scan resolution	1200 dpi
Colour depth	48-bit/16-bit
Scan size	42 inches wide scan size
Media types	Able to scan varying conditions of non-abrasive paper documents
Scan file format	Output format like PDF, TIFF, JPEG, JPEG 2000, etc. with multipage PDF generation capability
Scan input modes	Paper entry with face up front entry rear exit or rewind to front face up, front entry, front exit with optional document return guide
Internal Storage	Internal storage with min 50 GB, USB 3.0 data transfer
Operating system	Windows 10/8/7 compatible
Energy requirement	Energy star qualified
Accessories	Floor Stand – which may include paper catch basket
Operating conditions	1 Degree centigrade to 35 Degree centigrade 99 % RH
Paper Path	Face-up, front entry, rear exit or rewind to front Face-up, front entry, front exit with optional Document Return Guide

Interface	USB 3.0 data with transfer rate up to 85MB/sec
	Optimised USB2 transfer rate up to 35MB/sec
Power supply	External power supply 100~240 VAC, 50-60Hz
Operating conditions	10ºC – 35ºC, 35% – 80% relative humidity non-condensing
Necessary software	Software for scanning, copying and printing, with interface designed for touch screens or mouse and keyboard operations.
Support	1 year seller warranty

4e):A3 Laser Colour Printer

Cartridge type	Composite
Type of printing	Colour
Paper Size	A3 (Max. size 12"x18")
Min Print Speed (A4)	20
Resolution (Dpi)	600x600
Memory (MB)	190 or more
Processor Speed (Mhz)	540 or more
Duplexing Feature	required
Duplex Print Speed (PPM / IPM)	20
Network Connectivity	required
Network Interface	Gigabit ethernet
Wireless Connectivity	required
USB Port	required
Number of Paper Trays	2
Duty Cycle /month (No of Prints)	>50000
Operating Temperature Range (Degree C)	10 to 35
Operating Humidity (RH) (In %)	20-70

Maximum Paper Weight	250 GSM
On site OEM warranty	1 year

4f):Document Scanner

Scanner Type	Sheet Fed
Scanning Technology	CIS
Document Size	Legal
Optical Resolution (Dpi)	600
Scan Speed	25
Colour Depth (Bits)	24
Paper Weight Handling Capacity (GSM)	209
Scanning Feature	Duplex
Multi Fed Detection Feature	required
Automatic Document Feeder (ADF)	required
USB interface	2
Network Interface	yes
Wi-fi Interface	yes
OS Compatibility	Microsoft Windows 7/8/10
Daily Duty Cycle	1500 pages
Scan File Formats	Should support output file format like PDF, JPEG, TIFF, BMP
Operating Temperature Range	10°C to 35°C
Operating Humidity	20% to 80% RH
On Site OEM Warranty (Year)	1year sellers warranty

4g): Online UPS

Type of UPS	Online
Capacity	05kVA
Input Voltage	Single Phase, 220V, 50 Hz
Output Voltage	Single Phase, 230V, 50 Hz
Rectifier Type	IGBT Rectifier
Power Factor	0.90 or better
Battery Type	Lead Acid, SMF Type
Battery Assembly	External with stand
Battery Backup	90 Minutes at full load drawn from the UPS
Warranty	Minimum 3years

(Accordingly rating and number of battery to be quoted by the vendors to support it)

4h):High End GPS

GNSS	
Basic configuration	GPS L1 only
Upgrade options	GPS: L2, L2C GLONASS: L1, L2 BeiDou: B1 Galileo: E1
Channels	120 channels
Integrated real-time	SBAS (WAAS, EGNOS, GAGAN, MSAS)1
Output data protocols	NMEA-0183 (GGA, VTG, GLL, GSA, GSV, RMC, GST, GGQ, LLQ) via Zeno Connect on WEH or position provided by Android Location Service via Zeno Connect on Android
Real-time protocols	RTCM 2.x, RTCM 3.0, RTCM 3.1, CMR, CMR+
Update rate	1 Hz (1 sec), Optional: 5 Hz (0.2 sec)
Horizontal real-time accuracy2 (SBAS or external source)3	1 cm + 1 ppm <5cm + 1 ppm with L1/L2 handheld <40cm L1 handheld <0.9 m with SBAS L1 handheld
Vertical real-time accuracy2	RTK (with AS10, L1/L2): 2 cm + 1 ppm, RTK (with internal, L1/L2): <10 cm + 1 ppm
Post processing accuracy static mode2	Horizontal: 3 mm + 0.5 ppm (rms) Vertical: 6 mm + 0.5 ppm (rms)
Time to first fix	Typically 40 sec
Technology	
Processor & memory	Ultra fast dual core 1.5 GHz and 1 GB RAM
Data storage	4 GB on-board iNAND – extensible with Secure Digital™ (microSD) Card compatible up to 32 GB

Operating system	Windows Embedded Handheld 6.5 Professional or Android 4.2.2
Screen	4.7" FWVGA (854x480) IPS, sunlight readable, capacitive multi-touch; Asahi Dragontrail chemically strengthened glass Brightness: 600+ cd/m2
Integrated camera	8 Megapixel camera with Autofocus & LED flash
I/O	1 x USB 2.0 port (fully waterproof even when the latch is open) Micro USB Client for data transfer and charging (fully waterproof even when the latch is open) External SMB antenna connector Integrated Audio and Microphone
Keyboard	Keypad with 3 operating system hard keys, 3 programmable buttons, one navigation wheel, a GNSS button and a power button
Additional sensors	3-axis accelerometers, 3-axis gyroscope, ambient light sensor, digital compass, altimeter/barometer, proximity, ambient temperature
gamtec	Typical measurement accuracy: distance +/- 1 mm (up to 300 m) Hz/V: 0.1°
Communication	
Integrated communication modules	Wireless LAN 802.11 b/g/n Bluetooth®: Class 2 (10m), v3.0 in Android OS and v2.0 in Windows Mobile OS WWAN 3.8G GSM (Zeno 20 UMTS) or CDMA (Zeno 20 CDMA), supporting the following RF bands: GSM: HSDPA/UMTS 800/850/900/1900/2100 MHz GSM: Quad-band EDGE/GPRS/GSM – 850/900/1800/1900 MHz CDMA: Dual-band EV-DO Rev. A - 800/1900 MHz – 800/1900 MHz
Power Management	
Batteries	Hot-swappable Li-Ion battery with 7800 mAh and one small internal battery which allows the hot-swap
Power management	Input: 100 - 240 V AC, 50 - 60 Hz; output: 5.0 V DC, 1.8 A Charge time: <6h
Operating time4	Real time DGNSS usage (via integrated modem): <7 hours Autonomous GNSS usage: 8 hours Bluetooth® usage: 20 hours Standby: up to 50 days
Physical Specifications	
Size	99 mm (3.9") x 259 mm (10.1") x 40 mm (2.0")
Weight	<880 g including battery
Sand & Dust	IP6x Dust IEC-60529
Water	IPx7 survives dip in 1m depth for 30min IEC-60529

Altitude	15,000 ft (4,572 m) at 73 °F (23 °C) to 40,000 ft (12,192 m) at -22 °F (-30 °C), MIL-STD-810G, Method 500.5, Procedure I, II & III	
Operating temperature range	–30 °C to +60 °C; MIL-STD-810G 501.5/502.5 I,II,III	
Storage temperature range	–40 °C to +70 °C; MIL-STD-810G 501.5/502.5 I,II,III	
Humidity	90% relative at -30 °C to +60 °C; MIL-STD-810G 507.5 II	
Drop	MIL-STD-810G 4ft drop, free to concrete 26 drops from 1.22 m (4 ft) MIL-STD-810G, Method 516.5, Procedure IV	
Vibration	MIL-STD-810G, Method 514.5 Procedures I & II, Category 4; General minimum integrity and the more rigorous loose cargo test Accessories and Optional Features	
Accessories and Optional Features		
Accessories	External battery charger, backpack kit, hard carry case, 12V vehicle charger, pole mount solution, anti-glare screen protectors, additional 5200 mAh battery	

4i): Mid Range Hand Held GPS

NETWORK	Technology	GSM / HSPA / LTE
BODY	Dimensions	149.3 x 70.2 x 8.2 mm (5.88 x 2.76 x 0.32 in)
	Weight	154 g (5.43 oz)
	Build	Plastic body
	SIM	Dual SIM (Nano-SIM, dual stand-by)
DISPLAY	Type	Super AMOLED capacitive touchscreen, 16M colors
	Size	5.6 inches, 80.1 cm^2 (~76.5% screen-to-body ratio)
	Resolution	720 x 1480 pixels, 18.5:9 ratio (~293 ppi density)
	Multitouch	Yes
	Protection	Corning Gorilla Glass (unspecified version)
PLATFORM	OS	Android 8.0 (Oreo)
	Chipset	Exynos 7870 Octa
	CPU	Octa-core 1.6 GHz Cortex-A53
	GPU	Mali-T830 MP1
MEMORY	Card slot	microSD, up to 256 GB (dedicated slot)
	Internal	64 GB, 4 GB RAM or 32 GB, 3 GB RAM

MAIN CAMERA	Single	13 MP, f/1.9, 28mm, AF
	Features	LED flash, panorama, HDR
	Video	1080p@30fps
COMMS	WLAN	Wi-Fi 802.11 b/g/n, Wi-Fi Direct, hotspot
	Bluetooth	4.2, A2DP, LE
	GPS	Yes, with A-GPS, GLONASS, BDS
	Radio	Stereo FM radio, recording
	USB	microUSB 2.0, USB On-The-Go
FEATURES	Sensors	Fingerprint (rear-mounted), accelerometer, proximity
	Messaging	SMS(threaded view), MMS, Email, Push Email, IM
	Browser	HTML5
		- MP4/H.264 player - MP3/WAV/eAAC+/FLAC player - Photo/video editor - Document viewer
BATTERY		Non-removable Li-Ion 3000 mAh battery

Note: Data for modules shall be provided by department. Satellite images shall be provided by department.

Please note , for all the above items Bidder should provide **COMPLIANCE with Proof via (Brochure / weblink / Screenshot).** Without sufficient proof Bid will be technically rejected.

5. Warranty:

The GIS Application shall be covered under on-site warranty of 4 (1+3) year from the date of installation and commissioning of the GIS Application. During the warranty period, the selected bidder shall be responsible for any troubleshooting of the GIS application software. In case if an error occurs, they must take necessary immediate steps for rectification. **The company has to respond to any request from us within 48 hours failing which security is liable for confiscation.**

For all the hardware, warranty shall be (OEM/1 year whichever is more + 3 years) from the date of operationalization. **The company has to respond to any request from us within 48 hours failing which security is liable for confiscation.**

6. Capacity Building & Training

Bidder should provide one technical person for training & capacity building on all software

supplied for minimum of 1 year without any extra cost including visits to the districts as and when ever required.

7. Time Schedule

The bidder shall be responsible for completion of the assignment as per the time schedule defined below and shall submit the deliverables in time. The broad time schedule is as follows:

Supply of software and hardware	Within 2 (two) months from the date of issue of order
Development of the GIS Application & Training	Within 4 (four) months from date of issue of order
Testing and Commissioning & Support	5thmonth from date of selection of bidder
Extended year warranty, after completion of standard warranty*	Yearly basis

(* The operation support is extendable subject to mutual agreement of terms and conditions)

8. Instructions to the Bidders

RFP Document: The RFP document can be collected and submitted as below:

1. Can be downloaded from www.nfmpjica.in and submitted to the office along with valid tender document fees.
2. Can also be collected directly from the O/o the Principal Chief Conservator of Environment, Forests & Climate Change, Forest Colony, Kohima by submitting tender document fees (Shri Ango Konyak, Mobile No. 9612160078; Shri SamomKhelen Singh, Mobile No. 70056 94845)
3. The bidder must submit the Technical Proposal and Financial Proposal for the complete scope of work as specified under Section-4 of this RFP document, non-compliance in this regard shall lead to declaration of the Proposal as non-responsive and shall be summarily rejected. The proposal should be made using English Language only. Conditional proposals also shall not be acceptable.
4. Joint venture / consortium proposals are acceptable. Both company credentials can be used for qualification of Bid.
5. The Bidder shall be responsible for all costs incurred in preparation and submission of their Proposals. Department shall not be liable for the costs incurred by the Bidder in any way.
6. Bidder should produce Manufacturer Authorization Certificate from OEM for all the items *viz.* software and hardware. If OEM will directly bid, they can produce Proprietary Article Certificate (PAC).

7. The tender fee- Rs. 1000/- (One thousand only) is non refundable.

8. The Technical Proposal document submitted by the bidder must be accompanied by an Earnest Money Deposit (EMD) (Refundable) of Rs. 5,00,000/- (Rupees Five Lakhs only) in the form of a Bank Demand Draft drawn in favour of Nagaland Forest Management Project Society payable at main Branch SBI Kohima, Nagaland from any scheduled commercial bank. Technical Proposals without EMD will be summarily rejected.

9. The proposal submitted must be valid for a period of at least 60 days from the date of submission.

10. For any clarification of any doubt about the RFP within the given time, the bidders can contact Shri SamomKhelen Singh, Dy. Project Director@ (khelen.samom@gmail.com, contact number - 7005694845).

11. It may be noted that quotations for Hardware and Software are to be submitted separately. Total price will be calculated as a Grand total

12. The software shall be such that it is optimised for the hardware specifications given in this document especially the computing capacity of the CPUs.

9.   Submission of Bid:

The Technical Proposal should be kept in a sealed envelope and shall be marked as "TECHNICAL PROPOSAL" on the Top. The Financial Proposal should also be kept in a sealed envelope and marked as "FINANCIAL PROPOSAL DO NOT OPEN WITH TECHNICAL PROPOSAL" on the Top. Both the sealed envelopes should be kept in an outer envelope which shall be marked as "Request for Proposal (RFP) for supply of SOFTWARE& HARDWARE for setting up GIS and Image Processing Lab".

The Technical proposal should not include any information related to the Financial Proposal. Technical proposals containing any indication of financial quote shall be summarily rejected. All the inputs which are part of the Technical Proposal should be included in arriving at the cost of the project in the Financial Proposal.

Proposal, complete in all respect can be mailed at the following address or dropped in the tender box kept in the room of Shri Ango Konyak, Dy. PD (Admin, Finance and Procurement) at the same address for the purpose.

The Chief Project Director, Nagaland
Nagaland Forest Management Project,
O/o the Principal Chief Conservator of Forest and Head of Forest Force,
Forest Colony, Kohima, Nagaland 797001

9.1   Submission of Technical Proposal

The technical proposal of the bidder should contain the RFP Cost, EMD and information in duly filled-in Forms with necessary supporting documents as proof of their eligibility,

capabilities and experiences as required for the project. List of Tech Forms is given below:

- ✓ Tech 1: Covering letter along with EMD

- ✓ Tech 2: Letter of Authorization for signing & submission of bid

- ✓ Tech 3: Organization details

- ✓ Tech 4: Latest Auditor certified Annual Turnover and Net-worth statement (last two financial years i.e. 2016-17 and 2017-18) supported by ITRs

- ✓ Tech 5:Technical Solution (Methodology and Work plan)

- ✓ Tech 6: Authorization certificate(MAF) for the software/hardware

The Technical Proposal document should be neatly page numbered and each page of the Technical Proposal shall be seal stamped and signed by the Authorized Signatory. Evaluation will cover the quality of proposal and clarity in presenting the proposal.

The Earnest Money Deposit (EMD) should be kept with the technical proposal.

Bidder should provide original manufacturer certificate for Geospatial software & hardware.

The Technical Proposal documents shall be enclosed in a sealed envelope super scribed with "TECHNICAL PROPOSAL" on the top of the envelope.

9.2   Submission of Financial Proposal

1. The Financial Proposal must be submitted as per the specified format Fin-I. Financial Proposal not submitted in the specified format, shall be summarily rejected.
2. The Financial Proposal shall be valid for a period of at least 60 days from the date of submission.
3. Each page of the Financial Proposal shall be seal stamped and signed by the Authorized Signatory.
4. Submitted Forms with illegible, overwritten, erased, illegible rate or rates not shown in both figures and words shall be rejected. Financial Proposals with Clerical and/ or arithmetic errors shall be summarily rejected. In case of mismatch between the quoted value in Figures and Words, the value quoted in words shall be considered. Decision of the evaluating authority of the department shall be final and binding.
5. Incomplete, illegible and unsealed proposals shall be summarily rejected. Telegraphic proposals shall not be accepted and no communication shall be entertained in this regard.
6. The Nagaland Forest Management Project Society reserves the right to accept/ reject any/ all proposal(s) without assigning any reason.

10.   Eligibility Criteria:

Bidders must meet the following eligibility criteria for evaluation of their bids. Bidders unable to meet the eligibility criteria shall not be considered for award of the work.

a)   Have valid registration/ incorporation document of the organisation.

b)   Must have enclosed the requisite tender fee for Rs. 1000/- (Rupees one thousand) only in the form of Demand Draft drawn in favour of Nagaland Forest Management Society payable at main branch SBI Kohima, Nagaland

c)   Must submit EMD for Rs. 5,00,000/- (Rupees Five Lakhs) only in the form of Demand Draft drawn in favour of Nagaland Forest Management Society payable at main branch SBI Kohima, Nagaland.

d)   The bidder must be in the business of developing and supplying GIS software and related services for at least 5 years as on date of submission of the bid. Copy of the work orders issued in 5 years prior to the date of submission of bid is to be submitted as supporting documents, as per Technical Formats.

e)   Joint venture is allowed and credential of both the companies can be used for qualification of BID. However, the difference in turnover of the two shall not be more than 5 times. JV certificate should provide as a proof.

f)   Bidder should have minimum annual turnover of Rs. 100 Lakhs during the last two financial year.

g)   Bidder should have a permanent office preferably in Nagaland or any place in North East state for more than 5 years. Certificate of Registered office address need to be produce.

h)   Offered Enterprise Geospatial solution which is going to be implemented by the bidder, should have been implemented in at least three state Forest Department or Govt. of India Forest Projects. Supporting Ref order along with customer name, email id and contact details for verification purpose should be attached.

i)   Software and Hardware proposed must be widely used internationally in forestry sector and must have trained developer, technical support specialist and published developer program widely available in India to support life cycle of this project.

j)   Bidder also need to submit a copy of the following:

   I.   GST Registration certificate;
   II.   IT return for last two FY (2016-17, 2017-18)

k)   The Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices nor should have been blacklisted by any Govt. or Govt. undertaking organizations at the time of submission of the bid. Bidder should submit a Self-declaration certificate, signed by the authorized signatory.

11.   Opening of Bid:

The Technical Proposal document shall be opened on the scheduled date and time as specified in the RFP document/ subsequent notifications. The Technical Proposal shall be scrutinized to verify the eligibility of the Bidder as per the Eligibility Criteria. Only those Technical Proposals, completely satisfying the Eligibility Criteria shall be declared as responsive proposal and shall be considered for evaluation of Technical Proposal. The process of selection is Quality cum cost based (60:40) and the society is not bound to accept the lowest quotation. Department will ask for technical presentation.

12.   Financial Proposal Evaluation

Financial proposal of the Technically Qualified Bidders only shall be considered for evaluation. The technically qualified bidders shall be intimated the *venue, date and time* of opening of Financial Proposals through the email address provided by them for communications. Financial Proposals shall be opened in presence of the Bidders who may choose to be present during opening of the Financial Proposal. If required, department may ask for technical presentation.

The Financial Proposals shall be scrutinized for their adherence to the specified format, and completeness. The Financial Proposals which are found to be incorrect, not signed and sealed, not in specified format shall be summarily rejected. Only those Financial Proposals found to be valid after scrutiny, shall be considered for further evaluation.

The unsuccessful bidders shall be duly intimated and their EMD will be returned within a period of one month from the date of issue of work order to the successful bidder.

EMD of the selected bidder will be kept as Security Deposit and will be released only after completion of Installation, Commissioning and training or Six months, whichever is later.

13.   Terms of Payment:

Software & hardware -

- 70% of the hardware and software price will be paid upon delivery of items.
- 20 % on the completion of installation and commissioning.
- 10 % -After one month from the date the equipment/software become operational and functions successfully.

Development of Geoportal & web Modules-

- 20% of the submission of SRS on Custom Development.
- 80% Custom Development will be paid after Web Module application testing and commissioning.

Extended Annual Maintenance

(1) <u>Software & Packages (After expiry of 1st year compulsory warranty and 3 years offered warranty):</u>
Charges towards extended annual maintenance shall be payable on quarterly basis on completion of each quarter. After expiry of 1st Year PBG, Bidder has to submit 5% Performance Bank Guarantee for extended Year AMC (validity will be as per work order).

(2) <u>Hardware(s) (After the expiry of OEM compulsory warranty):</u>
Charges towards extended annual maintenance shall be payable on quarterly basis on completion of each quarter. After expiry of 1st Year PBG, Bidder has to submit 5% Performance Bank Guarantee for extended Year AMC (validity will be as per work order).

Operational/Technical Support at GIS Data Centres

The charges towards operational support will be payable by the selected bidder for the first year, thereafter charges towards operational support will be payable by the client on monthly basis, for which the Operational/Technical support charges will be quoted by the bidders. (The Operational/Technical Support is subject to the requirement of the Client).

14. Renewal of the Operationalization Contract

The selected Bidder shall sign the Annual Support Contract (ASC) with the department to effect operationalization of the GIS Data Centre through provision of the specified human resources. The ASC shall be renewed on mutual agreement of terms and conditions between Nagaland Forest Management Project and the selected Bidder. The decision of the Chief Project Director, Nagaland Forest Management Project in this regard shall be final and binding.

15. Cancellation of Order

If the selected Bidder fails to deliver the services in terms of quality and time, department reserves the right to cancel the purchase order and shall take appropriate steps against the default bidder as deemed fit by law.

16. Force Majeure

Notwithstanding the above provisions, the selected bidder shall not be liable for penalty or cancellation of purchase order for default if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure. For the purpose of this clause, "Force Majeure" means an event beyond the control of the Bidder and not involving the Bidder's fault or negligence and not foreseeable. Such events may include but not restricted to, wars or revolutions, epidemics and natural calamity. In case a Force Majeure situation arises, the Bidder shall promptly notify NFMP in writing of such condition and the cause thereof. Unless otherwise directed by department, the bidder shall continue to

perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternatives of performance not prevented by Force Majeure.

17. BID Response Formats

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Tech 1:   Covering letter

Tech 2:   Letter of Authorisation for signing & submission of bid (If it is other than owner)

Tech 3:   Organisation details

Tech 4:   Latest Auditor certified Annual Turnover and Net-worth statement along with Copies of Audited balance sheet with original auditor certified turnover statement for the last Two Financial Year.

Tech 5:   Technical Solution (Methodology and Work plan)

Tech 6:   Original Manufacturer authorization certificate (MAF) for Geospatial Software& Hardware

Tech I:

Covering Letter

(*To be submitted on Organisation's Letterhead only*)

Date: _____

To
The Chief Project Director
Nagaland Forest Management Project
O/o the Principal Chief Conservator of Forest and Head of Forest Force,
Kohima, Nagaland 797001

Sub: Request for Proposal (RFP) for setting up of GIS and Image processing Lab.

Ref: Your RFP no ....dated.........

Dear Sir,

Having examined the Request for Proposal (RFP), the receipt of which is hereby duly acknowledged, we are pleased to submit our Bid along with all supporting documents, requisite RFP Cost and EMD for your evaluation.

We confirm that the information contained in this response or any part thereof, including its exhibits and other supporting documents & instruments delivered or to be delivered to the PMU of Nagaland Forest Management Project Society, is true, accurate, verifiable and complete. This response includes all the information necessary to ensure that the statements therein do not in whole or in part mislead the PMU in its short listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be false, misleading or incomplete during the short listing process; we are liable to be dismissed from the selection process or termination of the contract during the Project, if awarded, for providing the said services/supply to the Project. We agree to unconditional acceptance of all the terms & conditions set out in the RFP document.

We further unconditionally accept all the Terms & Conditions mentioned in the above referenced RFP document. Deviations if any, to the Terms & Conditions mentioned in the above referenced RFP document reflected in our Bid, the same shall be liable to be summarily rejected without any reference to us.

Contacts Information

Name	
Title	
Name of the firm	
Address of the firm	
Phone	
Mobile	
Email	

It is hereby confirmed that I/We are entitled to act on behalf of our firm and are authorized to sign this document as well as such other documents, which may be required in this connection.

Dated this day of _____ Month, 2019

(Signature) in the capacity of

Name & address of the firm with seal stamp of the bidder

Witness signature

Witness name

Letter of Authorisation
(*to be submitted on organisation's letter head*)

Date: _____

To

The Chief Project Director

Nagaland Forest Management Project

O/o the Principal Chief Conservator of Forest and Head of Forest Force,

Kohima, Nagaland 797001

Sub: Request for Proposal (RFP) for setting up of GIS and Image processing Lab.

Ref: Your RFP no.......................

Dear Sir,

With reference to your RFP ...., we hereby authorize Mr/Ms *<name>*, *<designation>* of our organization whose signature is attested below, as our authorized representative to sign the bid documents including all documents in support of our bid on our behalf.

We hereby agree to ratify the acts, deeds and things lawfully done by our aforesaid representative and shall always be deemed to have been done by us and accordingly binding on us.

_____

(Signature of Authorised Representative)

Yours Sincerely,

_____

(Signature)

Name:

(Designation/ Head of the Organisation)

Tech 3:

Organisation Details (*to be submitted on company letter head*)

Name of the Organisation	
Year of Establishment	
Address of Registered office	
Location of works (address)	
Telephone numbers	
Email address	
Contact person's details	
Contact person's designation	
Contact person's mobile number	

If any other extra information

_____

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Tech 4:

Turnover & Net Worth statement
(*to be submitted on letter head*)

Sl.	Financial Year	Turnover (in Rs.)	Net Worth (in Rs.)
1.	2016-17		
2.	2017-18		

Tech 5:
Technical Solution (Methodology and Work plan)

Approach, Methodology & Work Plan to fulfil objectives of the assignment as indicated in the RFP document (*to be submitted on company letter head*)

Tech 6:
Manufacturer Authorization certificate

Manufacturer's / Licensor's Authorization Form (MAF), Bidders other than sole agents in India of the quoted Geospatial software solution, IT Equipments, etc. must submit a letter of authorization from the OEM that they have authorized the bidder to quote for the solution. Original Manufacturer can use their own format for authorization certificate of all the items. If OEM directly bid, then they can use Proprietary Article Certificate (PAC).

FIN 1:

Financial Proposal (to be submitted on letter head)

Date: _____

To

The Chief Project Director

Nagaland Forest Management Project

O/o the Principal Chief Conservator of Forest and Head of Forest Force,

Kohima, Nagaland 797001

Sub: Request for Proposal (RFP) for setting up of GIS and Image processing Lab.

Ref: Your RFP ………. dated

Dear Sir,

We the undersigned, offer to provide the services in response to the RFP No .... including ....

 Our Financial Proposal is given below.

Software:

Sl.	Description	Qty
1	Image Processing Software (COTS)	2
2	GIS Software (COTS)	2
3	Enterprise /Server Engine GIS software (COTS)	1
4	Anti Virus Software (8 yr license for all)	Lump Sum
5	Custom Modules – as specified in the RFP (liable to change subsequently)	Lump sum
6	Extended warranty for three years (after 1 year compulsory warranty on Sl. No 1 -4)	Lump Sum

Hardware:

1	High End Server	1
2	Mid Range Workstation	3
3	Plotter	1
4	Large Format Scanner	1
5	A3 Colour Printer	1
6	Document Scanner	1
7	Online UPS/Power Back up system	1

8	High End Hand Held GPS Devices	1
9	Mid Range Hand Held GPS Devices	55
10	LED TV (55 inch) – for use as large monitor at times 4 K res.	1
11	Switch and Firewall (manageable)	1+1
12	System set up and integration	LS
13	Extended year warranty for three years apart from OEM warranty (Sl. No. 1-11)	Lump Sum

We agree that:

1. No line item will be selected separately.

2. Intender may decrease or increase no of items as per funds

We also understand that you are not bound to accept any proposal that you receive.

Yours Sincerely

Authorised Signature (in full and initials)
Name and Title of signatory:
Name of the Consultant (Company Name):
In the capacity of_____
Address_____

EVALUATION OF TECHNICAL BID

The Evaluation Committee will check the submission as per the criteria. Those are selected after the check shall be called for a Technical Presentation. The committee will evaluate the technical bids as per the "Technical Presentation" mentioned in the following table. The technical presentation will be of approximately 20 minutes duration. Evaluation of the technical presentation shall be conducted by the evaluation committee and shall be based on the past experience of the bidder in execution of similar projects, live GIS demonstration of similar   project   executed   in the   past,   proposed   approach & methodology for the assignment. Nagaland Forest Department may also seek written clarifications from the bidders on the bids submitted by them, during the evaluation process. The primary function of clarifications in the evaluation process is to clarify ambiguities and uncertainties, if any, arising out of the evaluation of the bid documents.

The bidder scoring minimum 65 marks out of 100 in the Technical Bid Evaluation process shall be declared as the Technically Qualified bidder. The Financial bids shall be opened only for the Technically Qualified bidders. The marks secured by the Technically Qualified bidder shall be considered as the Technical Score (TS). The Technical Score (TS) of the Technically Qualified bidder shall be weighted on a scale of 60.

EVALUATION OF PRICE BID

The price bids shall be opened only for the Technically Qualified bidders. The date, time and venue of the opening of price bids shall be communicated to the Technically Qualified bidders in advance. The authorized representatives of the Technically Qualified bidders may be present during the price bid opening process. The price bids shall be scrutinized for their conformity to the specified formats and signatures. The   price   bids   not   in specified format and/or not with signature of the authorized representatives shall be summarily rejected. The evaluation of the price bids will be based on the combined Quality and Cost Based Selection (QCBS) Method.

Scrutiny and evaluation of the price bids shall be conducted as follows.

In the event of difference between the price mentioned in figures and words, the price in words shall be considered valid and binding.

Scores of the price bid evaluation would be weighed on a scale of 40. The Bidder with the lowest Price Quote shall be awarded 100 marks. The marks obtained by the bidders in the price bid evaluation shall be considered as Financial Score (FS). The price bid Score of the other Technically Qualified bidders shall be computed as per the following formula.

$$PS = 100 \times (P_{min} / P_b)$$

Where,

PS = Price Bid Score for the bidder under consideration

Pmin = minimum price quoted by any bidder

Pb = price quoted by the bidder under consideration

The Technical Score (TS) and the Price Bid Score (PS) secured by each bidder shall be subjected to the Technical Weightage WT = 0.60 (the weight given to the technical bid); Wp = 0.40 (the weightage given to the price bid). The combined score (S) for the bidder shall be computed as per the following formula.

$$S = (TS \times 0.6) + (PS \times 0.4)$$

The bidder securing the highest combined score (S) shall be considered as the successful bidder and considered for award of the contract. Nagaland Forest Project Management Society reserves the right to negotiate with the successful bidder.