

**REPLY TO PRE-BID QUERIES FOR AUTOMATIC CHANGE DETECTION AND MONITORING SYSTEM USING HIGH RESOLUTION SATELLITE IMAGE FOR GURUGRAM AND FARIDABAD DISTRICTS**

S. No.	Reference (Page No./ Para / Sub para No.)	Subject/ existing clause	Clarification Sought	Suggestions / Remarks (if any)	Department's reply
<b>SKYMAP GLOBAL INDIA PVT. LTD., JAIPUR, RAJASHTAN</b>					
1	Page No. 44	3-D View/model generation upto LOD-1 and identification of change in height	Identification of change in height	This is applicable for only building layer? Or features to be digitized in 3D mode. Pls clarify.	The 3-D information model upto LOD-1 is required for building layer only.  2D change detection is to be done for Buildings and Roads.
2	Page No. 44	Analysis for change in height to be done twice	Change in height	Please clarify the report submission format for change in height to end user hierarchy for submission of report.	3D-based change detection in height is to be colour coded (thematic display) and displayed in the Web application. <u>Example 1:</u> variation less than 3 meter – Green, Between 3-6 meter – Orange so on.  <u>Example 2:</u> All new buildings in Green, where building ht has increased in blue color and where there is no change in building height to be represented as Red color.  The thematic display is to be shown in web based 3D city model application.

3		For Ortho-rectification	GCP Data	Who will provide the ground control points?  Department will provide or bidder will do the necessary DGPS Survey for data.	Department will only provide coordinates of the Control Points from existing Satellite Image available in the Department. However, the bidder may carry out DGPS survey for further correction, if required.
4		No. GCP points		How many GCP points are required to cover the entire area for rectification? Please clarify.	Total area of Gurugram and Faridabad districts is 2000 Km <sup>2</sup> (appx.). The requirement for no. of GCP points is to be assessed by the bidder for rectification.
5		EMD	EMD Fees	Can MSME Certified and Start up India company get EMD exemption? Please clarify	Yes, MSME/NSIC Certified and Start up India companies are exempted from submitting EMD on submission of MSME certification and Startup India documents
6	Page No 30	*Security Audit: Security Audit of the application will be conducted by Information Security Management Office(ISMO)-Haryana	Security Fees	Who will pay third party Security Audit cost? Please clarify	There is no cost. If any, it will be borne by the Department.

**SCANPOINT GEOMATICS LIMITED, AMBLI ROAD, AHMEDABAD, GUJARAT**

7	<p>15.1 CHANGE DETECTION (QUARTERLY)</p> <p>Page no. 22</p>	<p>The Department has already procured GF-2 sensor, 80 cm resolution satellite image from NRSC in September 2017. This satellite image has been used to create a GIS vector data that comprises of the Development plans, Controlled Areas, Sector Circulation plans and Urban Area plans.</p>	<p>“We understand that the TCP has vector layers with client”. If yes, then</p> <ol style="list-style-type: none"> <li>1. Which GIS layers are with department? Give details.</li> <li>2. What is the accuracy of GIS layers and georeference images?</li> <li>3. What is the scale of mapping used in existing vector layers? Please clarify.</li> </ol> <p>If no, Then</p> <ol style="list-style-type: none"> <li>4. Who will be responsible to provide vector data for map creation for Development plans, Controlled Areas, Sector Circulation plans and Urban Area plans, Client or Bidder? Please clarify.</li> </ol>	<p>Base map will be created if required.</p>	<p>All required layers of revenue estate, boundaries, land parcels, controlled areas, Development plans, sector circulation plans and urban area plans are digitized by the department on ortho-rectified GF-2 satellite imagery.</p> <p>The accuracy &amp; scale of GIS layers and satellite images as per the specifications of the GF-2 sensor.</p> <p>The department will provide all required digitized GIS layers.</p> <p>The Building and Road layer for which change detection is to be carried out are to be digitized by the bidder.</p> <p>All bidders are once again urged to visit the Department and understand the GIS data layers and other applications like Enforcement module with which the mobile application has to be integrated.</p>
8	<p>15.1 CHANGE DETECTION (QUARTERLY)</p> <p>Page no. 22</p>	<p>The Department has already procured GF-2 sensor, 80 cm resolution satellite image</p>	<p>Is the TCP want to be procure same satellite image of GF-2 sensor or any other high resolution</p>	<p>High resolution stereo satellite data will be procure for TCP.</p> <p>IGiS Enterprises suit have capability to build automated Image</p>	<p>Satellite imagery of spatial resolution 50 cm is to be procured.</p>

		from NRSC in September 2017.	stereo data will be ok, by the Bidder? Please clarify.	processing/analysis of the multi-Spectral images based on Artificial Intelligence /Machine learning algorithm to enable effective tracking of construction activities for the same.	
9	v. TIMELINE FOR DELIVERY OF QUARTERLY REPORT: Page no. 24	The quarterly change detection report shall be delivered within 20 days from the date of receipt of satellite images from NRSC, Hyderabad. First quarter will start from the date of award of work. However, the total delivery period including time taken by NRSC for clearance, shall not exceed 60 days.	The time for delivery of quarterly change detection report is entirely depends on Image received from NRSC only. Bidder will not responsible for this, as the image procurement process is very slow.	Dependency on NRSC. IGiS Enterprises suit have capability to extract Automatic Change detection application.	No change
10	15.2 CHANGE DETECTION – HEIGHT Page no. 24	3D model/view upto Level of Detail – 1 (LOD-1) is to be generated from these three data sets i.e. TIME SERIES 1, TIME SERIES 2 and TIME SERIES 3.	“We understand that GCP and 3D data will be provided by TCP” 1.Is the GCPs and 3D building information with the department? Please clarify.	IGiS platform solution have capability to build 3D application using the same.	Already replied at Sr. No. 3 & 7 above.
11	15.4 Mobile Application Specifications: Page no. 27	b) Shall allow the user to select any site and update its status like ownership, land details, status of construction, use, purpose,	Is the scope involve property survey using mobile application also? Please clarify?		No property survey is to be carried out.

		assign a unique id as per the department's existing application etc. For assigning unique id, use and purpose integration with the existing application (developed in ASP.NET / SQL Server) of the department with APIs is required. Vendors may visit the Department for reviewing these applications.			
<b>GIS CONSORTIUM INDIA PVT. LTD. SUKHVIHAR, DELHI</b>					
12	13.3 Prequalification Criteria , point 7 page number 20	At least 1 project for web-based satellite imagery based monitoring/change detection application development project for state/central government/ public sector with value of one project more than Rs 50 Lakhs	We request you to kindly allow development of GIS based web application development projects for any state/central government/ public sector withvalue of one project more than Rs 50 Lakhs	GIS is well capable of developing GIS based web application projects and have developed for many services for ULBs.	The clause stands modified as follows:  At least 1 project for web-based application development for state/central government/ public/ private sector with value of one project more than Rs 50 Lakhs.
<b>ML INFOMAP, KATWARIA SARAI, NEW DELHI</b>					
13	13.3 Prequalification Criteria  Page 20 of 49	Bidder should have a minimum average annual turnover of Rs. 5 crore & above during the last 3 financial years (FY 2015-16, 2016-17 & 2017 - 18).	We request you to consider <b>Rs 4.0 Crores</b> as average Turnover for last 3 financial years to increase healthier		No change

		Supporting document from Company chartered Accountant must be attached, along with Audited Profit and Loss Statement should be attached along with the response document	competition between bidders.		
14	RFP Process Guideline for Online Payments at e-Procurement Portal of Government of Haryana Page 4 of 49	<b>EMD to be deposited by Bidder Rs 2,00,000/</b>	We request you kindly consider exemption to bidders registered under MSME/ NSIC from submission of EMD.		Already replied at Sr. No. 5
15	15.1 Change Detection (Quarterly) Page 22 of 49	<p>i. Quarterly procurement of PAN-sharpened satellite same sensor data of 50 cm resolution.</p> <p>ii. The Department has already procured GF-2 sensor, 80 cm resolution satellite image from NRSC in September 2017. This satellite image has been used to create a GIS vector data that comprises of the Development plans, Controlled Areas, Sector Circulation plans and Urban Area plans.</p> <p>The selected vendor will ensure that the satellite</p>	<p>As mentioned in Tender specification for Satellite Sensor procured by Dept and said to procure on quarterly basis are different in resolution i.e. 50cm &amp; 80cm.</p> <p>Kindly specify which HRSI to be procured by the Bidder on award of tender.</p>		Satellite imagery of spatial resolution 50 cm is to be procured.

		images to be procured under this project are rectified with the available satellite images of the Department so that there is no geometrical mismatch between the vector data already created by the Department and the satellite images to be procured quarterly under this project.			
16	15.3 j) Satellite Imagery based web application development for 2D/3D view, query and analysis system.  Page 25 of 49	Proposed solution should be in the form of Open Source/IP/COTS based customisable product as per requirements. Bidder should have full control on source code for necessary customization.	We request you to specify, if currently the department is using any COTS Software for existing Web Applications in the Department		At present, the department is using open source based web application. However, this Web application is not be used for the customization under this project.  Bidder has to customize its own product as per the specifications given in the RFP.
17	15.4 Mobile Application Specifications:	The Geo-tagging based mobile application shall have following features:  a) For assigning unique id, use and purpose integration with the existing application (developed in <u>ASP.NET</u> / SQL Server) of the department with APIs is required. Vendors may visit the Department for reviewing these applications.	It is not mentioned anywhere in the RFP on which platform the Mobile application will be developed.		The mobile application should be compatible with leading mobile-based operating systems like latest android and ios versions.  The Mobile application has to be integrated with the Desktop application called "Enforcement", which is already functional and developed in ASP.NET. The unauthorized structures identified by Change detection, will be confirmed using the

					<p>Mobile App by the field staff and final action i.e. Demolition is also to be updated using the Mobile app. The data of detection and demolition thus generated is to be pushed to the Department Servers.</p> <p>Details are to be finalized in the SRS.</p> <p>However, the bidders are urged to visit to the Department to understand the current Desktop application with which the Mobile App is to be integrated.</p>
<b>NORTH SOUTH GIS INDIA PVT. LTD.SVK TOWERS, KUSHAIGUDA, ECIL MAIN ROAD, HYDERABAD</b>					
18	Section no. 16 Sl. No. 02	<p>Evaluation Criteria</p> <p>Quality / Security Certification</p> <ul style="list-style-type: none"> <li>• ISO 9001:2015 &amp; 27001:2013</li> </ul> <p>Marks 5</p>	<p>Request to amend changes for Quality / Security Certification</p> <ul style="list-style-type: none"> <li>• ISO 9001:2015 or</li> <li>• 27001:2013</li> </ul> <p>Marks 5</p> <p>OR</p> <p>Quality / Security Certification</p> <ul style="list-style-type: none"> <li>• ISO 9001:2015</li> </ul>		No change



19	Section No. 13.3 Prequalification Criteria	Joint Venture and/or consortium bid is not allowed.	Request to change: Joint Venture and/or consortium bid is allowed.		No change
20	Section No. 13.3 Prequalification Criteria Sl. No 09	Prequalification Criteria:  Bidder should have been involved in Image Processing business for any Govt. organization/public sector in India or abroad.	Clause to be removed: Bidder should have been involved in Image Processing business for any Govt.Organization/publi c sector in India or abroad.		No change
21	Section No. 13.3 Prequalification Criteria Sl. No 07	At least 1 project for web- based satellite imagery based monitoring/change detection application development project for state/central government/ public sector with value of one project more than Rs 50 Lakhs	At least 1 project for web-based application development project for state/central government/ public sector with value of one project more than Rs 50 Lakhs		The clause stands modified as follows:  At least 1 project for web-based application development for state/central government/ public/ private sector with value of one project more than Rs 50 Lakhs.
<b>RUDRABHISHEK INFOSYSTEM PRIVATE LIMITED, A-6, SECTOR-58, NOIDA-201301, UP</b>					
22	Page no. 20, 13.3, Sl. No.1	The prime bidder should be at least ISO 9001:2015, 27001:2013 Certified Company for IT/ICT/Software Development / GIS related activities	Since most of the GIS consultancy firms does not require ISO 270001:2013 and joint consortium is not allowed, we request you to kindly modify/change the criteria as "The prime	Since most of the GIS consultancy firms does not require ISO 270001:2013 and joint consortium is not allowed, we request you to kindly modify/change the criteria as "The prime bidder should be at least ISO 9001:2015 Certified Company	No change

			bidder should be at least ISO 9001:2015 Certified Company for IT/ICT/Software Development/ GIS related activities”	for IT/ICT/Software Development/ GIS related activities”	
23	Page no. 20, 13.3, Sl. No.4	Bidder should have a minimum average annual turnover of Rs. 5 crore & above during the last 3 financial years (FY 2015-16, 2016-17 & 2017 - 18).	For better quality and competitive we request you to kindly modify/change the criteria as Bidder should have a minimum average annual turnover of Rs. 2 crore & above during the last 3 financial years (FY 2015-16, 2016-17 & 2017 - 18).	For better quality and competitive we request you to kindly modify /change the criteria as Bidder should have a minimum average annual turnover of Rs. 2 crore & above during the last 3 financial years (FY 2015-16, 2016-17 & 2017 - 18).	No change
24	Page no. 20, 13.3, Sl. No.7	At least 1 project for web-based satellite imagery based monitoring/change detection application development project for state/central government/ public sector with value of one project more than Rs 50 Lakhs	For competitiveness, we request you to kindly modify/change the criteria as At least 1 project for web-based satellite imagery based monitoring/ change detection application development project for state/central government/ public/ <b>private sector</b> with value of one project more than Rs 50 Lakhs	For competitiveness, we request you to kindly modify/change the criteria as At least 1 project for web-based satellite imagery based monitoring/ change detection application development project for state/central government/ public/ <b>private sector</b> with value of one project more than Rs 50 Lakhs	The clause stands modified as follows:  At least 1 project for web-based application development for state/central government/ public/ private sector with value of one project more than Rs 50 Lakhs.

25	Page no. 20, 13.3, Sl. No.7	Joint Venture and/or consortium bid is not allowed.	For better quality and competitiveness we request you to kindly allow consortium bid.	For better quality and competitiveness we request you to kindly allow consortium bid.	No change
<b>CEINSYS TECH LIMITED, IT PARK, NAGPUR, MAHARASHTRA</b>					
26	Page no 21./ 13.4 Evaluation Process	iii. Those who secure 50 marks and above as a result of evaluation of the technical proposal shall become eligible for opening of their Financial Proposal.		Request you to amend the clause as below.  iii. Those who secure 70 marks and above as a result of evaluation of the technical proposal shall become eligible for opening of their Financial Proposal	No change
27	Page No 21 /13.5 Award of Contract	ii. Contract would be valid for 3 years, to be extended on mutual agreeable terms between both parties.	We assume that after 3 years of O&M if the contract is extended, price escalation will be borne by the department.		The selected vendor will train the Department's GIS team to carry out the change detection analysis after the completion of the three year contract period.  Following are to be incorporated in the bid:  Bidder has to provide a detailed <b>Exit Management Plan</b> along with the Technical Bid that shall include :  <ul style="list-style-type: none"> <li>• Software required to be procured by the Department for carrying forward the Change detection analysis (both 2D and 3D) after the end of three year contract period.</li> </ul>

					<ul style="list-style-type: none"> <li>• Specifications of the Hardware required to be procured to carry out Change detection analysis (both 2D and 3D) after the end of three year contract period.</li> <li>• Details of the on-site hands-on training to be imparted to the GIS team</li> <li>• Any other details as required for a smooth exit so that Department can take over the project after the completion of the three year contract period.</li> </ul> <p>Further, following additional costs are to be provided in the Financial Bids:</p> <ul style="list-style-type: none"> <li>• Training Cost as part of the Exit Management is to be included in the Financial Bid</li> <li>• Cost of the two year AMC after the completion of contract period will be part of the Financial Bid.</li> </ul>
28	Page no 22/ 14 RESPONSIBILITIES OF SUCCESSFUL BIDDER	ii. The successful bidder shall be responsible for customization, development and deployment of the application as per the requirements of the Department.	We assume that all the requirement will be finalized at the time of SRS, any change request will be mutual between SI and the department.		Agreed
29	Page no 22/ 14 RESPONSIBILITIES	vi. Conduct three day training to the Department staff at Headquarter and	Please clarify number of circle office for training.		Already given at Section 14 (vi) of the RFP

	OF SUCCESSFUL BIDDER	Circle offices Gurugram and Faridabad after completion of development and UAT.			
30	Page no 22/ 14 RESPONSIBILITIES OF SUCCESSFUL BIDDER	vii. Provide user and administration manuals.	Please clarify whether hard copies of the manual need to be provided or only soft copies.		Hardcopies and soft copies of the manual to be provided by the successful bidder
31	Page 21	Joint Venture and/or consortium bid is not allowed.	The scope of work is specialized and need industry experts for the same , we request you to kindly allow joint venture or consortium		No change
32	Page no 32/ 28 PENALTY FOR LATE DELIVERY AND UPTIME	Web-based application and Mobile application development: The application development shall be completed within three months from the date of award of work. This shall include SRS preparation, development of application, testing and UAT. In case of delay, penalty ranging from 5% to 10% per week of delay will be imposed on the total payment of application development subject to a maximum of 20% of the total payment for application development.		We request to modify clause as below The application development shall be completed within three months from the date of award of work. This shall include SRS preparation, development of application, testing and UAT. In case of delay, penalty ranging from 5% to 10% per week of delay will be imposed on the total payment of application development subject to a maximum of <b>10%</b> of the total payment for application development. Quantum of the penalty will be decided by Director, Town and Country Planning which shall be final and binding.	No change

		Quantum of the penalty will be decided by Director, Town and Country Planning which shall be final and binding.			
33	Page no 32/ 28 PENALTY FOR LATE DELIVERY AND UPTIME	<p>Delivery of quarterly reports:</p> <p>In case of delay in submission of quarterly report as per the timelines given in schedule at point no. 18 above, penalty ranging from 5% to 10% per week of delay will be imposed on the quarterly payment. Quantum of the penalty will be decided by Director, Town and Country Planning. Maximum limit of such penalty will be 15%.</p>		<p>We request to modify clause as below Delivery of quarterly reports: In case of delay in submission of quarterly report as per the timelines given in schedule at point no. 18 above, penalty ranging from 5% to 10% per week of delay will be imposed on the quarterly payment. Quantum of the penalty will be decided by Director, Town and Country Planning. Maximum limit of such penalty will be <b>10%</b>.</p>	No change
34	Page no 32/ 28 PENALTY FOR LATE DELIVERY AND UPTIME	<p>Delivery of 3-D city models :</p> <p>In case of delay in submission of 3-D city models as per the timelines given at Appendix - 1, penalty ranging from 5% to 10% per week of delay will be imposed on the quarterly payment. Quantum of the penalty will be decided by Director, Town and Country Planning. Maximum limit of such penalty will be 15%.</p>		<p>We request to modify clause as below Delivery of 3-D city models: In case of delay in submission of 3-D city models as per the timelines given at Appendix - 1, penalty ranging from 5% to 10% per week of delay will be imposed on the quarterly payment. Quantum of the penalty will be decided by Director, Town and Country Planning. Maximum limit of such penalty will be <b>10%</b>.</p>	No change

35	Page no 32/ 28 PENALTY FOR LATE DELIVERY AND UPTIME	Maintenance and Support: During maintenance period the successful bidder to ensure the application uptime of 99%. In case the application is reported as DOWN, the successful bidder shall ensure the application is up and running within 24 hours of such issue reported. The mode of reporting such issue shall be through email. On delay beyond 24 hours, penalty upto Rs 25,000/- may be levied for each such delay.		We request to modify clause as below  Maintenance and Support: During maintenance period the successful bidder to ensure the application uptime of 99%. In case the application is reported as DOWN, the successful bidder shall ensure the application is up and running within 24 hours of such issue reported. The mode of reporting such issue shall be through email.  On delay beyond 24 hours, penalty upto Rs 25,000/- may be levied for each such delay. Maximum penalty shall be 10% of total value for maintenance and support.	No change
36	Page 38 / 48 xiv Other conditions	T&CPD reserves the right to cancel/withdraw the bid without assigning any reason for such decision. Such decision will not incur any liability whatsoever on the part of T&CPD consequently.	We request the department that any cancellation/withdrawal should be after assigning proper reasons.		No change
37	Page 44/ Annexure 5,	Pricing Bid Format	As per the format, the company needs to quote the prices inclusive of all taxes  There is no provision for revision in rates of taxes or introduction of new taxes / levies.		Accepted.

			We request to add the para "Prices quoted shall be inclusive of current rate of GST. Any variation in the rates of GST or introduction of new taxes or levies shall be paid as applicable at the time of delivery / invoicing."		
<b>SAMVRIDDHI, L 22/4 L BLOCK, CASSIA MARG DLF PHASE -2, GURGAON</b>					
38	Section 15.3, (i), m		<p>What should be the template of the web application?</p> <p>A) View of map of all districts to all the user limited only to edit rights</p> <p>B) Create a drop down list of districts to choose for view and editing.</p>		<p>The user shall be able to select one or more districts of his choice and data pertaining to the selected district(s) is to be displayed.</p> <p>Further details to be finalized at SRS stage.</p>
39			Currently, Which GIS platform is being used by the department. Or Does the department prefer any specific platform for development of the application.		<p>For Desktop applications, Department uses Geomedia Professional.</p> <p>For Web GIS, Department has got developed open source based application.</p>



					<p>However, this Web application is not be used for the customization under this project.</p> <p>Bidder has to customize its own product as per the specifications given in the RFP.</p>
<b>RSI SOFTECH INDIA PVT. LTD. INDUSTRIAL ESTATE, KUKATPALLY, HYDERABAD</b>					
40	Page no. 20/pre-qualification criteria 13.3/SI.NO.01	The prime bidder should be at least ISO 9001:2015, 27001:2013 Certified Company for IT/ICT/Software Development/ GIS related activities		We suggest you to please include CMMI level 3 or higher certified company	No change
41	Page no. 20/pre-qualification criteria 13.3/SI.NO.03	The bidder should be in the field of Remote Sensing, GIS & Web GIS business for at least 3 years as on date of submission of the bid		The bidder should be in the field of remote sensing, GIS & Web GIS business for at least 10 years as on date of submission	No change
42	Page no. 20/pre-qualification criteria 13.3/SI.NO.07	At least 1 project for web-based satellite imagery based monitoring/change detection application development project for state/central government/public sector with value of one project more than Rs 50 Lakhs		<ol style="list-style-type: none"> <li>1. Please allow group companies to participate (RSISOFTECH company has done this work on behave of RSI group)</li> <li>2. Requesting to please consider any web based satellite imagery based application development</li> </ol>	<p>The clause stands modified as follows:</p> <p>At least 1 project for web-based application development for state/central government/public/ private sector with value of one project more than Rs 50 Lakhs.</p>

43	Page no. 20/pre-qualification criteria 13.3/Sl.NO.08	At least one project for Geo-dashboard and geo tagging based mobile application for state/central government / public sector with value of project more than Rs 15 Lakhs			No clarification sought by the bidder. No change.
44	Page no. 29/Evaluation criteria 16/Sl. No. 03	Web-based satellite imagery based monitoring/change detection application development project for state with value of one project more than Rs 50 Lakhs <ul style="list-style-type: none"><li>• One project</li><li>• Two project</li></ul>		We suggest you to please consider on the basis of volume of work done instead of no. of projects alone. <ul style="list-style-type: none"><li>• One project with more than 1 crore</li><li>• Two projects with more than Rs 50 Lakhs</li></ul>	No Change
45	Page no. 29/Evaluation criteria 16/Sl. No. 04	Projects by the bidder for dashboard and geo tagging mobile application for state/central government/public sector with value of one project more than Rs 15 Lakhs <ul style="list-style-type: none"><li>• One project</li><li>• Two project</li></ul>		We suggest you to please consider on the basis of volume of work done instead of no. of projects alone. <ul style="list-style-type: none"><li>• One project with more than 1 Crore</li><li>• Two projects with more than Rs 50 Lakhs</li></ul>	No change

## PRICE BID FORMAT

Sl. No.	Description	Unit	Total Cost including taxes (INR)
1	<b>DATA ACQUISITION</b>		
	Quarterly Ortho-rectified Processed Satellite imagery Procurement 0.5 meter resolution through NRSC for Gurugram and Faridabad districts 9 times in three years  (check data acquisition schedule at Appendix-1)	2000 Sq. Km. (Approx.);  9 times in three years	
	Procurement of Stereo Pair 0.5 meter resolution through NRSC for Gurugram and Faridabad districts 3 times in three years  (check data acquisition schedule at Appendix-1)	2000 Sq. Km. (Approx.);  3 times in three years	
2	<b>CHANGE ANALYSIS</b>		
	Change detection Analysis and submission of quarterly reports, 11 times in three years  (check data acquisition schedule at Appendix-1)	11 times in three years	
	3-D View / model generation upto LOD-1 and identification of change in height  (check data acquisition schedule at Appendix-1)	<ul style="list-style-type: none"> <li>• 3D view / model generation to be done thrice</li> <li>• Analysis for change in height to be done twice</li> </ul>	
3	<p><b>Application Development:</b></p> <p>a) Web based Change Detection viewing (2D and 3D) and imagery Platform customization including UAT, deployment, maintenance for three years and Training</p> <p style="text-align: center;">AND</p> <p>b) Mobile application for Geotagging and field verification including UAT,</p>	For unlimited users, perpetual	

	deployment, maintenance for three years and Training		
<b>4</b>	<b>AMC</b>		
	1 <sup>st</sup> Year	1 <sup>st</sup> Year	
	2 <sup>nd</sup> Year	2 <sup>nd</sup> Year	
<b>5</b>	<b>Hands on training for technical resources of department on 2D/3D change detection software at department HQ. This will include detailed training on algorithms, tools, processes, etc. required to generate change detection data as part of exit management plan</b>	Lump sum	
	<b>TOTAL</b>		

- The scope may be extended at any time during the project period to include other/all districts of Haryana as per the rates mentioned above.
- Rates are to be quoted including taxes.

### TECHNICAL PRESENTATION

The demonstration date is rescheduled to 12.04.19 from 11:00 AM onwards.