

CORRIGENDUM - 5

KERALA RAIL DEVELOPMENT CORPORATION LIMITED (KRDCL)

Corrigendum Publishing Date: 14.05.2021

Ref: E-Tender - Tender No: KRDCL/26/2021 dated 17.04.2021.

Name of Work: Conducting Aerial LiDAR Survey between Kollapally (Near Ramapuram) and Erumeli as part of Angamali – Sabari BG Line Rail Project.

Reply to Pre-bid Queries

Sl. No.	Section No.	RFP Clause No.	RFP Pg. No.	Content of RFP Requiring Clarification Change	Change Requested/ Clarification sought by bidder	KRDCL Reply
1	Detailed Specification of Aerial LiDAR Survey	a (Data Capture Specifications)	37	Single/Twin engine aircraft may be used for airborne LiDAR remote sensing. However, Twin engine aircraft provide efficient operations for sensors up to 6000m above sea level; they are equipped with power sources to handle asuite of modern sensors; they offer work space and comfort to the pilot and camera operator; and the twin engines provide additional safety in the event a single engine should stall. Agency/ contractor will be fully responsible for safety using Single/Twin engine aircraft/helicopter. 10 Points/m2 , (minimum, after discarding unusable points)	Request you to allow us to use the Drone for Aerial LiDAR survey	Request from the bidder to allow for using Drone for Aerial Survey is not accepted. Detailed specification (a) Data capturing in RFP. Page No.37 remains without any changes.
2	Detailed Specification of Aerial LiDAR Surve	Operating Altitude	37	150m–900m	As we are proposing drone, so we are requesting you to change the Operational altitude from range of 50m.	No change.
3	General Conditions & Instructions To Tenderers:	3	1.1.2 Technical Criteria	The bidder must own/lease 1 Aerial LiDAR Scanner– 1 Own range at least 1000 m or above with IMU, GPS and associated Control Units 1 Aircraft/ Helicopter 1 Own/Lease 3 DGPS (dual frequency, at 5 Own least 200 channels) 4 Aerial Medium Format 1 Own Camera (above 50 Megapixel) 5Pre-processing Software (LIDAR Trajectory) 1 Own 6 Post-processing Software (Terrascan/ Terrasolid / point Tool /or Similar) 1 Own	Can the bidder qualify if they have a LiDAR and DGPS system on Lease? As the DGPS systems are easily available to lease and specifying on owning these systems makes the bid highly restrictive. Other prestigious railway authorities in India that carry out lidar surveys have also allowed leasing of LiDAR sensors for their contracts in order to open up the bid for more technically qualified companies.	No change.

4	General Conditions & Instructions To Tenderers:	4	1.1.3 Work Experience	Similar Works shall mean the work of Aerial LiDAR /aerial photography survey for at least 15 sq. km and minimum 35% of estimated cost for any project in India carried out for Railways, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking, Municipal Body, Autonomous Body of Central/State Governments or Public Ltd. Companies listed on Stock Exchange in India or Abroad or subsidiaries of such companies, for Government/PSU/World Bank/JICA or ADB funded projects	Based on the TOR the width of the corridor that needs to be captured is 300m for a 40Km corridor length. Capturing this width on a manned aerial vehicle is a form of linear flying. Based on this, can the past experience of Linear Aerial Capture be considered for Qualifying? We sincerely request you to amend this to 15KM. This will ensure maximum participation by technically qualified agencies	Corrigendum 3: Para No. 3, the Work Experience vide clause -1.1 of Technical Criteria (Volume-1) is withdrawn / Cancelled.
5	General Conditions & Instructions To Tenderers:	4	1.1.3 Work Experience	Similar Works shall mean the work of Aerial LiDAR /aerial photography survey for at least 15 sq. km and minimum 35% of estimated cost for any project in India carried out for Railways, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking, Municipal Body, Autonomous Body of Central/State Governments or Public Ltd. Companies listed on Stock Exchange in India or Abroad or subsidiaries of such companies, for Government/PSU/World Bank/JICA or ADB funded projects	Will international experience be considered for the purposes of QC? Restricting qualification based on having work Experience within India highly restricts the bid. As the number of Aerial LiDAR work executed in India is not much when compared to International LiDAR works. The scope of work done internationally is much the same as in this project. This will ensure maximum participation by technically qualified agencies	Same as above
6	Section II General Terms & Conditions	4	1.1.3 Work Experience	Similar Works shall mean the work of Aerial LiDAR /aerial photography survey for at least 15 sq. km and minimum 35% of estimated cost for any project in India carried out for Railways, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking, Municipal Body, Autonomous Body of Central/State Governments or Public Ltd. Companies listed on Stock Exchange in India or Abroad or subsidiaries of such companies, for Government/PSU/World Bank/JICA or ADB funded projects	Considering the limited volume of work for this project, we request you to consider work experience of similar works done by UAV mounted LiDAR systems in railway projects. However, we understand K-Rail's requirement to use a Manned Aircraft to execute this project. Our Company is fully capable of carrying out this work on a manned aircraft as required.	Same as above

7	Section II General Terms & Conditions	21	5. Time Schedule	Main Activities Target D is the Date of issue of LOA 1. Statutory approvals D+10 days 2. Completion of field work for setting up all control points by DGPS/ Digital levels and finishing all preparatory works for doing LiDAR Survey. D+15 days 3. LiDAR Survey and data capturing and collections of all other data as per scope of work D+25 days 4. Processing, preparation, CAD work, And submitting the data and CAD survey plan (draft) including XYZ data and DTM etc. i. 0-40 Km D+35 days 5. Draft Survey Report and other data D+ 40 days 6. Final Survey Report and final data D+ 45 days	The time allotted for statutory permissions is given as 10 days. Previously, it used to take up to 90 days to get the required permissions. However due to the new guidelines issued by the Department of Science & Technology and Survey Of India this timeline has reduced considerably. However due to the current Pandemic these timelines are unachievable. Request you to kindly reconsider these timelines. So that the contractor/agency is not penalised for things beyond their control.	No change in Time Schedule.
8	Query	N/A	N/A	N/A	Can an International company bid in the form of a JV/Consortium with an Indian Company? (The financial quote, however, would be in INR and the POC would be the Indian Company)	Corrigendum 3: Para No. 3, the Work Experience vide clause -1.1 of Technical Criteria (Volume-1) is withdrawn / Cancelled.
9	Query	N/A	N/A	N/A	Can the Work Experience be considered jointly for a JV/Consortium? We would request you to consider the	Same as above
10	Query	N/A	N/A	N/A	We have completed over 900 km of LiDAR capture for NHRCL in an ongoing project with a JV partner. Our remit for the job, viz. Aerial LiDAR Data Capture with Ortho-imagery has been completed and the data has been submitted to the Client. The balance work of Final Alignment Design is in the remit of our DPR partner in the JV. Will you consider our experience as compliance of QC for your bid?	Same as above.

11	Page No 01 of Corrigendum 3			Corrigendum 3: Para No 3 (Work Experience), under clause-1.1 (Technical Criteria) of Volume 1 is withdrawn/Cancelled Clause 1.2 (Financial Criteria), Volume 1 is withdrawn/Cancelled	Do these statements mean that any bidder is eligible o submit their offers even without having prior similar technical & financial capability/experience? Please also clarify if Technical & Financial criteria is withdrawn/cancelled, then there is no requirement of submitting technical bid? Submission of only Financial bid is sufficient? Please clarify on above 2 queries.	Corrigendum 3: Para No. 3, the Work Experience vide clause -1.1 of Technical Criteria (Volume-1) is withdrawn / Cancelled.The Financial Criteria vide clause 1.2 Volume-1 is withdrawn / Cancelled.All other requirements remain as “Not Changed”. No change in submission of Single stage Two packet bidding.
12	Page No 21 of RFP			Corrigendum 2: Bid submission date 10th May 2021 Time Schedule: Final Survey Report and final data: D+ 45 days	In view of the present severity of COVID-19 pandemic in Kerala State and associated lockdown in Kerala from 8th – 16th May, is there a possibility in extending the bid submission date beyond 10th May? Keeping in view of unexpected current COVID-19 pandemic severity and upcoming Monsoon in Kerala state starting from June 1st week, it is impossible to complete the aerial data acquisition and submission of processed deliverable within 45 days. Hence, we request you to amend the project completion date as 45 days after end of this year’s monsoon period, i.e., 45 days from 1st October 2021. Kindly consider and clarify on above mentioned points.	Please refer Corrigendum -4 published on 10.05.2021 for the revised dates. No change in Time Schedule.

For KRDCL

Sd/-
K.J.Joseph
GM/Civil/KRDCL