

RESPONSE TO PRE-BID QUERIES ON RFP FOR PROCUREMENT OF QTY 10 SETS OF ATS (EXTENDED RG) ALONGWITH QTY 120 LOITER MUNITIONS THROUGH FTP UNDER EP-IV : CAT-BUY (INDIAN)

<u>S No</u>	<u>RFP Para</u>	<u>RFP Requirement</u>	<u>Queries</u>	<u>Comments by DG Arty/ Arty-12</u>
<u>AVision Systems Pvt Ltd</u>				
1.	Para 33	Demonstration within 45 days of issue of RFP	Since the time for procurement and modification of veh is more and can be commenced only after certain clarifications.	<p>(a) The demonstration be preferably carried out from modified Launcher Vehicle.</p> <p>(b) In case procurement & modification of Launcher Vehicle is not possible, the demonstration be carried out without it.</p> <p>(c) First Off Production Model (FoPM) evaluation of the modified Launcher Vehicle to be carried out by the L-1 vendor within three months from signing of contract.</p> <p>(d) 01 x additional Loiter Munition to be earmarked by the bidders for FoPM evaluation involving Flight & Strike, in addition to quantity already indicated in the RFP (Contracted + Demonstration + Proof Firing).</p> <p>(e) Details of Launcher Vehicle identified for procurement & its planned modification by the Bidders be presented during demonstration.</p> <p>(f) Advance payment of 15% of the contracted amount to be made to the L-1 bidder after getting FoPM compliance.</p> <p>(g) The costing of Launcher Vehicle & its modification to be included in the bid.</p>

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2.	Appx A, Para 1 (d)	Launch method- Veh based Canister/ Pneumatic/ VTOL	It is necessary for the Loiter Munition to be vehicle based and launched from the vehicle only. Can it be launched from a towed launcher from the ground also?	(a) Launch mechanism ie Canister/ Towed Launcher is required to be fitted on the Launch Vehicle, as specified at Para 1(b) of Appx 'A' & Para 39 of Part- II of the RFP. (b) The Loiter Munition has to be launched from the launch mechanism fitted on the vehicle. (c) Launch from towed launcher from ground is not applicable.
			What is meant by pneumatic is it supposed to be from a canister using pneumatic force?	It is one of the option for launch.
3.	Appx A, Para 1 (j)	Impact Angle	What is the max impact angle essentially reqd for ' Top Attack '?	Should be able to attack from any direction (including Top Attack) as specified at Para 1 (j) of Appx A of RFP. Ideally, the impact angle for top attack could be $85^{\circ} \pm 5^{\circ}$.
4.	Appx A, Para 1 (o)	Abort, Re-Attack, Re-use Capability	At what stage should the munition be able to Abort the mission and be available for re-use ; at the Loiter stage or at the engagement stage after being fully armed? In other words, is it reqd that the munition should be able to abort the attack after being fully armed and commencing the engagement and be safely recovered for re-use?	The Loiter Munition should have the capability to abort the mission even after being fully armed and thereafter be safe to be recovered for re-use.

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5.	Appx A, Para 1 (p)	Warhead Safety- There should be safety interlocks such that the munitions are safe if in case they are recovered after aborting msns	Should the Warhead Safety device allow for a safe recovery of the warhead after it has been Fully Armed for target engagement?	Confirmed.
6.	Appx A, Para 2 (a)&(b)	Launcher Vehicle	Is it reqd that the one launcher vehicle should have the comd, cont & comn sys, power supply sys and the launcher installed on the veh for the Loiter Munition?	Confirmed.
			Since the launcher veh should be able to be capable to “launch the projectile in autonomous mode”. Having the launcher and cont eqpt installed on the same veh will have better tac mobility and lower visible footprint of the detachment.	
			Is it reqd for the same launcher veh have an addl Loiter Munition stowed?	Yes. Minimum four (04) Loiter Munition is required to be carried on Launcher Vehicle in addition to other fitment.
			Is an addl comn sys (radio set) reqd on the same launcher veh for tac comd and cont of the ATS-ER detachment	Yes. However, it will form part of Optional Equipment on offer as per Para 29 of Part –II of RFP & It will not form part of L-1 bidder determination.

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7.	Appx A, Para 7 (a)	Safety Features	Should the safety features also ensure that the warhead is safe for handling after it has been 'fully armed' for attack, msn aborted and recovered?	Confirmed.
8.	Appx A, Para 7 (c)	Arming Safety	<p>What is the quantification of "immediately"-should the wpn be ready for firing within 5 mins from the transportation box or less?</p> <p>Would it be allowed that the wpn requires assembling of various parts like wings etc in order to prep it for launch from transportation condition.</p>	As specified at Para 7(c) of Appx A of RFP. Pre-Launch Preparation time to be minimal.
9.	Annex-I to Appx-F, Para 14	Environmental Test Report	Since the sys is reqd to undergo the environmental tests after integration on the veh, the reports should be acceptable at the time of delivery.	<p>(a) The Environmental Test Report of eqpt & munition less the modified Launcher Vehicles (if not demonstrated) are required to be submitted at the time of demo, as applicable.</p> <p>(b) Environmental Test Report of Modified Launcher Vehicles to be submitted at the time of FoPM.</p>

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<u>Adani Elbit Advanced Systems India Limited</u>				
10.	Para 12	In Service Life / Shelf Life	Bidder is required to give details of reliability model, reliability prediction. Is there any specified format for this analysis	To be specified by the bidders.
11.	Para 13	Product Support	Para 13 of General Requirements: Bidder to provide shelf-life extension Page 2 of 5 methodology along with the Technical Bid. Is there any specified format for shelf-life extension methodology?	To be specified by the bidders. Suggested model is mentioned below: - (a) <u>Phase - I</u> . Sub-component level check. Replacement of parts lived its shelf life. (b) <u>Phase -II</u> . Proof firing for Loiter Munition after sub-component level check.
12.	Para 15	Training of Crew, QA, and Maintenance Personnel	The technical qualifications and competence of operators should be commensurate to the QRs defined by Bidder in case duration of training is to be restrained to two weeks. Will that be acceptable?	QRs to be defined by the bidders. Suitable reps will be detailed accordingly. Any additional time required can be specified by the bidder.
			We understand that STEs/ SMTs/Equipment, simulators, LM, etc. provided as part of supplies will be used during the training session. Please confirm.	Training to be conducted by bidders utilizing its training infrastructure & resources. Same is not linked with deliverables.
13.	Para 33	Demonstration/ Evaluation	Will the equipment of the winning bidder retained at PFFR be counted as a deliverable against the Contract?	No.
			Kindly confirm that operators from the OEM (our technology partner) can be provided security clearance for participating in the NCNC demonstration, as trained Indian operators are not available now.	Confirmed.

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14.	Para 39	Evaluation of Technical Offers	It is requested that Appropriate Safety, security, and storage facilities be supported by Indian Army for warheads, at the Trial location.	Confirmed. The details will be amplified in demonstration methodology.
			Please specify whether the vehicle need to be commercial grade or military grade. If they are to be military grade, should these have been already inducted Page 3 of 5 into the Army or whether vehicles inducted in other Services (IAF/IN) would be acceptable.	Vehicle needs to be Military grade as per Para 2 A4 of Appendix J of RFP.
			Procurement and modification of a vehicle within the time frame of 45 days may not be feasible, hence it is requested that this requirement not be insisted for the demonstration.	<p>(a) The demonstration be preferably carried out from modified Launcher Vehicle.</p> <p>(b) In case procurement & modification of Launcher Vehicle is not possible, the demonstration be carried out without it.</p> <p>(c) First Off Production Model (FoPM) evaluation of the modified Launcher Vehicle to be carried out by the L-1 vendor within three months from signing of contract.</p> <p>(d) 01 x additional Loiter Munition to be earmarked by the bidders for FoPM evaluation involving Flight & Strike, in addition to quantity already indicated in the RFP (Contracted + Demonstration + Proof Firing).</p>

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				<p>(e) Details of Launcher Vehicle identified for procurement & its planned modification by the Bidders be presented during demonstration.</p> <p>(f) Advance payment of 15% of the contracted amount to be made to the L-1 bidder after getting FoPM compliance.</p> <p>(g) The costing of Launcher Vehicle & its modification to be included in the bid.</p>
			Provisioning of the Simulator may not be possible for the NCNC Demonstration hence it is requested that this requirement not be insisted for this demonstration.	To be shown during NCNC demonstration/ before opening of commercial bid. Can be planned at bidders premises.
15.	Para 42	Quality Assurance Instructions & Technical Evaluation Plan	How is the check proof of Loitering Munition envisaged? Does it involve flight and strike?	Proof firing envisages firing one Loiter Munition of each type of warhead in day & one of the munition at night, involving flight & strike. It should be of same lot as those being delivered.
16.	Para 1 (e) of Appx A	Operational Parameters (Warhead Weight)	Lethality may be more appropriate than weight of Warhead. What is the lethality expected? Could the Warhead be of lesser than 8 kg weight, but which would deliver more lethality and damage?	<p>(a) Details of Warhead is mentioned at Para 1 (e) & (f) of Appx A of RFP.</p> <p>(b) Lethality to be specified by the bidders.</p>
17.	Para 1 (g) of Appx A	Endurance -Up to 2 hours	Kindly clarify whether endurance of less than 2 hrs, is acceptable.	Endurance required as per Para 1 (g) of Appx A of RFP.
18.	Para 5 of Appx A	IRNSS Compatibility	Is IRNSS compatibility essential? How is it expected to be checked during the demonstration?	To be shown during demonstration. In case it is under development, an undertaking certificate to be rendered by the L-1 bidder for upgrading the system with IRNSS receiver, once developed, at no extra cost.

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19.	Para 6 of Appx A	Defence Series Maps (DSM) Compatibility	Can the details of Defence Series Maps be provided to us for ascertaining their compatibility? Otherwise, system Page 4 of 5 specifications for ensuring this compatibility be shared.	Details will be shared with L-1 bidder based on Non-Disclosure Certification. To be demonstrated during FoPM evaluation/ Proof Firing.
20.	Para 7 (d) of Appx A	Safety Features: Safety in handling, repair and in the event of misfire to be ensured	How is safety in event of Misfire to be ensured? Kindly elaborate this point and suggest how this is to be demonstrated / checked. In our understanding if the Warhead has inbuilt safety features any other features are not required. Is this acceptable?	It should have in-built safety features & laid down procedures to handle misfire of Loiter Munition. Same to be specified by the bidders.
21.	Para 7 (e) of Appx A	Blast protection measures during firing should be incorporated	Blast protection measures during firing should be incorporated. Kindly elaborate this point and suggest how this is to be demonstrated / check. In our understanding if the Warhead has inbuilt safety features any other features are not required. Is this acceptable?	It should have in-built safety checks to prevent warhead blast during firing.
22.	Appx C	Warranty Clause	Acclimatization period while attending to equipment located in specific High Altitude Areas may please be factored while calculating down time.	Confirmed.

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23.	Para 1 (a) Appx 'E'	'O' Level	How many locations will the Buyer's Maintenance team have to visit during each round of Preventive Maintenance? What is the likely spread of these locations?	As per Para 1(a)(i) of Appx E.
24.	Appendix E, Annexure -I: Para 1 (c)		Acclimatization period while attending to equipment located in specific High-Altitude Areas may please be factored while calculating down time.	Confirmed.
25.	Para 10 of Appx F	Vendor Certification	Certificates by NABL accredited Labs or Labs certificated by equivalent international bodies may also be permitted.	Confirmed. The international bodies should have similar certification as that of NABL accredited labs.
26.	Para 1.4.7 of Appendix H	Commercial Clauses	Whether we can get Customs duty exemption certificate as per Notification No 41/2022 dated 13 July 2022, from Ministry of Finance	The 41/2022 only includes private industry along with PSU, DPSU for CDEC. The stores/ goods for which CDEC can be availed is as per department of expenditure notification 19/2019.
27.	Para 2 of Appx H	Bank Guarantee	Can we submit E-Bank Guarantee?	Confirmed.
28.	Para 1 (b) of Appx L	Average Annual Turnover	Please confirm if the Minimum Average Turnover of the parent company can be clubbed with that of the bidding firm to meet the requirement	As per provisions of Para 3 of Annx-'IV' of Appx 'A' of Ch-II of DAP -2020

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<u>TATA Advanced Systems Limited</u>				
29.	Para 1(o) of Appx A, Page 19	The munition should have Re-use capability	Re-use in the same mission is possible. Should the LMs be equipped with a recovery mechanism?	Yes, the Loiter Munition should be able to recover with recovery mechanism & thereafter be re-used.
30.	Para 1(p) of Appx A, Page 20	There should be safety interlocks such that the munitions are safe if in case they are recovered after aborting missions	Is recovery of LMs with HE warheads envisaged?	Confirmed.
31.	Para 1(f) of Appx A, Page 20	Warhead Types - High Explosive Pre-Fragmented (HEPF) and/ or Anti-Armour	Is anti-armour warhead expected to defeat ERA equipped armour?	Confirmed.
			If yes, what is the minimum RHA thickness expected to be penetrated?	Capability to be specified by bidders.
32.	Para 1(t) of Appx A, Page 20	The capability should also exist for moving target.	What is size and max speed of the moving target?	To be specified by bidders.
			CEP may increase based on speed and direction of motion of the target	CEP to be as per Para 1(b) of Appx 'A' of RFP
33.	Para 7(e) of Appx A, Page 21	Blast protection measures during firing should be incorporated	It is understood that blast protection is expected during launch of UAV?	As per safety features mentioned at Para 7 of Appx 'A' of RFP.
34.	Para 10 of Appx A, Page 22	The system should be operational both during day and night in all weather conditions.	Does all-weather includes rain and snow? If yes, what are the envisaged limits?	As per environmental conditions mentioned at Para 9 & 10 of Appx 'A' of RFP. Amplification, if any, to be included in the Bid.

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35.	Para 2 of Appx F, Page 40	Three (03) Loiter Munitions (Anti-Person/ Anti-Armour/ Hybrid Armour having both Anti-personnel and anti-armor capability.	(a) How many LMs will be launched during the demo? (b) What type of warhead will be used for demo?	As per Para 39 of Part II- Technical Requirements of RFP.
36.	Para 1(n) of Annexure I to Appx E, Page 43	Damage assessment- Telemetry feed from projectile and capability to loiter in target area	Confirm - damage assessment telemetry feed is expected from the buddy LM?	May be utilized by the bidders to demonstrate PSDA capability as an optional capability as per Para 29 of Part-II of RFP.
37.	Page No 13, Point No 37	OIMS (Online Inventory Management System)	Kindly confirm if this data has to be provided during Contract Stage?	Confirmed.
38.	Page No 19, Appendix A, Point 1.k	Sensor Package Requirement: It should have Electro Optical (EO) Payload used for ISR during day and night conditions	Kindly confirm if only Electro Optic sensor- based payload is required or thermal payload is also envisaged for Night operations.	Para 1 (k) & (l) of Appx 'A' of RFP clearly outlines payload requirements for day & night conditions. Appropriate payload essential for night operation to be specified by the bidder.
39.	Page No 33, Annexure I to Appendix E	Annual Maintenance Contract	Kindly confirm that the system is envisaged with warranty of 2 years+ AMC for 3 years along with MRLS for 3 years (For Operator Level Repair)? If yes, then kindly confirm no of locations envisaged for such servicing activity.	As per Para 1(a) (i) of Appx 'E' of RFP.

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TISA Aerospace Pvt Ltd				
40.		War Head	What will be the max. payload you are looking for.	As per Para 1 (e) & (f) of Appx A of RFP.
41.		Weight	What will be the max. Take-off weight you are looking for.	To be specified by bidders. Expected to be about 50 Kg.
42.		Range	Any max. range you are looking for.	As per Para 1 (a) of Appx A of RFP.
43.		Endurance	Will there be minimum endurance threshold.	As per Para 1 (g) of Appx A of RFP.
44.		Sensors	Any specific sensors that need to be used.	As per Para 1 (k) of Appx A of RFP.
45.		Dimensional constraints	Please let us know any dimensional constraints to be considered.	To be specified by bidders.
46.		Battery or Fuel	Would you want battery powered or Fuel powered.	Both options kept open.
47.		Autopilot	Please specify if you have any standard that we need to follow.	To be specified by the bidders.
48.		Telemetry	Can we use off the shelf or any specific frequencies that needed from your side.	To be specified by the bidders.
49.		Launch Method	Vehicle based Canister only or Catapult launcher also along Canister.	As per Para 1(b) of Appx 'A' & Para 39 of Part- II of the RFP.
50.		Aerial Targeting System	Please let us know if you have any specific things that we need to know about this.	As per Para 4 of covering note of RFP.

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CLARIFICATION BY DG ARTY																
51.	Para 2 A-5 of Appendix J of RFP	<div>Identification of Common Warhead for Determination of L-1 Bidder</div> <table><tr><td rowspan="4">Cost of Loiter Munition (to be as per one of the three options)</td><td rowspan="2">Option -I</td><td>Anti-Personal</td><td>80</td><td rowspan="4">Type of Warheads to be contracted is subjective to performance during the Demonstration</td></tr><tr><td>Anti-Armour</td><td>40</td></tr><tr><td>Option -II</td><td>Anti-Personal</td><td>120</td></tr><tr><td>Option -III</td><td>Hybrid Warhead having both Anti Personal & Anti-Armour capability</td><td>120</td></tr></table>	Cost of Loiter Munition (to be as per one of the three options)	Option -I	Anti-Personal	80	Type of Warheads to be contracted is subjective to performance during the Demonstration	Anti-Armour	40	Option -II	Anti-Personal	120	Option -III	Hybrid Warhead having both Anti Personal & Anti-Armour capability	120	<p>(a) All bidders to furnish the cost of Anti Personal Warhead only (as per Option-II), for determination of L-1 bidder.</p> <p>(b) In addition, bidders can offer Anti-Armour/ Hybrid Warhead as an Optional Equipment, as per Para 29 of Part-II of RFP & demonstrate its capability during evaluation.</p> <p>(c) Anti-Armour / Hybrid Warhead will not form part of L-1 bidder determination however it may be considered for procurement by the user during CNC stage as an Optional Equipment.</p>
Cost of Loiter Munition (to be as per one of the three options)	Option -I	Anti-Personal			80	Type of Warheads to be contracted is subjective to performance during the Demonstration										
		Anti-Armour		40												
	Option -II	Anti-Personal		120												
	Option -III	Hybrid Warhead having both Anti Personal & Anti-Armour capability	120													
52.	Para 1 (o) of Appendix A	Abort, Re-attack & Re-use capability		Bidders to specify number of times the Loiter Munition can be recovered & re-used.												
53.	Para 14 of Annexure-I of Appendix F of RFP	Submission of QA certification & COC for environment conditions		Bidders to submit an undertaking along with the Bids for furnishing COC/ Environmental Conditions certification from NABL accredited lab at the time of demonstration.												
54.	Para 42 of RFP	Formulation of Draft ATP		Bidders to submit draft ATP along with bids. The draft ATP will be analysed for adequacy and sufficiency during demonstration.												