

A/36026/FRCV/Lt Tk/RFI/GS

22 Apr 2021

REQUEST FOR INFORMATION (RFI)
LIGHT TANK (TRACKED) FOR INDIAN ARMY

1. **Introduction.** The Ministry of Defence, Government of India, intends to procure a new generation Combat Vehicle Platform, **approximately 350 Light Tanks** in a phased manner, along with Performance Based Logistics, niche Technologies, Engineering Support Package, and other Maintenance and Training requirements. The Light Tank is planned to be procured under the '**Make-in-India**' ethos and spirit of the Defence Acquisition Procedure (DAP) - 2020.
2. The Ministry of Defence, Government of India, seeks information from the Vendors/Industry for participation in Light Tank project in accordance with Chapter-II of DAP- 2020.
3. **Structure.** This Request for Information consists of two parts as indicated below: -
 - (a) **PART - I.** The first part of RFI incorporates the operational characteristics to include **intended use of Light Tank, Technical Parameters, Transfer of Technology, Indigenous Content, Delivery Schedule and Training requirements**, which should be met by the Vendors/ Industry.
 - (b) **PART - II.** The second part of the RFI states the **methodology of seeking response of the Vendors/ Industry**. Submission of incomplete response format will render the Vendors/ Industry liable for rejection.

PART - I

4. **Intended use of the Equipment.** In the foreseeable operational scenario, the need for an agile and mobile light platform, with adequate firepower, protection, surveillance and communication capabilities is increasingly finding its operational relevance. The Light Tank must have the versatility to execute operations in varying terrain conditions across diverse threat and equipment profile of the adversaries Hence, Light Tank , having employability in various sectors in the country, as well as rapid overseas deployment capability is an operational imperative.
5. **Important Technical Parameters.** Broad operational requirements are tabulated at **Appendix 'A'**.

6. **Approximate Cost Estimate**. The Vendors are to provide indicative cost for the Platform offered along with the breakdown of cost is to be indicated. Other aspects (if any) may be mentioned specifically.
7. **Basic Design**. The Vendor is to indicate the Basic Design (Base Model) of the platform offered along with the names of customer (Army) to whom the same on similar platform has been contracted or delivered. In addition, proposed configuration, service life and technologies that have already been integrated or capable of being integrated into the basic design of the Light Tank platform on offer, is to be indicated.
8. **Transfer of Technology (ToT)**. The Government of India, Ministry of Defence, is desirous of acquiring Comprehensive Technologies including detailed design manufacturing know-how of the Light Tank platform being offered. The Indian Development Agency will retain the ownership of the design and technologies for the platform to ensure achievement of 'Atmanirbhar Bharat'. The vendors are required to identify each system/sub-system in the platform offered and provide information on the categories of ToT offered.
9. **Tentative Delivery Schedule**. The vendor is required to indicate the overall time frame of delivery of the platform under various kit configuration. It would include stage wise break-up to include delivery of ammunition and missiles and establishment of maintenance infrastructure and repair facility.
10. **Warranty**. The supplied Light Tank Platform (s) and equipment shall carry a warranty of 24 months from the respective date of delivery or acceptance of each Light Tank platform by user post Joint Receipt Inspection (JRI), whichever is later. The warranty should cover both Hardware and Software, as applicable.
11. **Training of Crew and Maintenance Personnel**. The vendor is to provide broad plan of training of all personnel along with the training aids as applicable (Crew Members, Instructors, and Maintenance Staff etc). Vendor should also indicate the place of training of crew.

PART – II

12. **Procedure for Response**.
 - (a) **Format**. The vendors must fill the form of response as given at **Appendix 'B'**. Apart from filling details about company, details about the exact product meeting other generic technical specifications should be carefully filled. Additional literature on the product can also be attached with the form.

(b) **Address for Response.** The filled form and the response (Hard and Soft copies) should be dispatched to the under mentioned address: -

**Directorate General of Armoured Corps
Project Light Tank, AC-4 (FRCV & EM)
General Staff Branch
Integrated Headquarters of Ministry of Defence (Army)
Defence Headquarters Post Office, New Delhi-110011**

Contact Details:

Tele : 011- 23792971

E mail: abhay-6337@gov.in

(c) **Time for Response.** Last date of Acceptance of Receipt of response is **18 June 21.**

13. The Government of India invites responses to this RFI **from the OEMs/ Auth Vendors/ Industry.** The end user of the equipment is the Indian Army.

14. This RFI is being issued with **no Financial Commitment** and the Ministry of Defence reserves the right to change or vary any part thereof, at any stage. The Government of India also reserves the right to withdraw it, should it be so necessary, at any stage.

15. The response needs to be detailed with provision of specific or not less than or not exceeding parameters so as to facilitate formulation of Staff Qualitative Requirement at Integrated Headquarters of Ministry of Defence (Army).

16. Reply to this **RFI** (and further communication on the case, including equipment description, training and documentation) are to be made in **English language only.** Response to the Request for Information is to be provided in **Hard and Soft Copy.** The compliance table to all aspects are required to be provided in editable form (preferably Microsoft Excel).

17. The offers shall be evaluated in accordance with provisions of DAP-2020. The Vendor is **liable to be disqualified for any materially false statement.**

Appendix 'A'
(Refers to Para 5 of the RFI)

BROAD OPERATIONAL REQUIREMENT (OR)
FOR LIGHT TANK (TRACKED)

1. **Operational Concept of Employment.** Light weight versatile weapon platform with enhance tactical/operational/strategic mobility with greater options for employment in High Altitude Area (HAA), marginal terrain (Rann), amphibious operations etc. The advancement in technology also facilitates that the 'Light Tank' is having weapon systems and protection of adequate capacity and is equipped suitably to operate in current/future threat spectrum, to support combat operations as a weapon system.

2. **Operational Parameters.** An Indian Light Tank must be adaptable to Indian Operational Environments and Threat-Cum-Capability Spectrum. **Details required from the vendors on various parameters are given below in a questionnaire form.** The vendors are requested to conform to the broad operational parameters enumerated below on the platform offered.

<u>SER NO</u>	<u>PARAMETERS</u>	<u>SPECIFICATIONS</u>	<u>VENDORS RESPONSE</u>
<u>BASIC CONFIGURATION</u>			Response with Yes/No should be suitably amplified
(a)	What is the combat weight of the offered platform?	Combat weight not to exceed 25 tons.	
(b)	What will be the dimensions of the platform offered?	The design should be modular and physical dimensions should not impede its transportability by in-service rail, road, air and water.	
(c)	What will be Crew configuration of the platform offered?	2/3	
(d)	What will be operational temperature range in which the system/ Sub-systems can operate?	All systems and assemblies including ammunition should be able to operate in a minimum temperature as in High Altitude Area and maximum range as existing in deserts terrain, including the existing humid conditions across varied terrain.	
<u>FIRE POWER</u>			
(e)	What will be the main armament offered and whether the same is upgradable or not?	Multiple, Modular and upgradable weapon system with capability to destroy and offer countermeasures to varied threats	

<u>SER NO</u>	<u>PARAMETERS</u>	<u>SPECIFICATIONS</u>	<u>VENDORS RESPONSE</u>
(f)	What type of secondary armament will the platform offer?	Multiple weapons for anti-air craft and ground role with different calibre assisted with Remote Control Weapon Station.	
(g)	What types of ammunition for both main and secondary armament can be fired from the offered platform along with the quantity?	Modern Advance Multipurpose 'Smart Munitions' with Gun tube launched anti-tank guided missile.	
(h)	What will be the maximum lethality achieved by the platform offered?	To defeat tanks / 'A' vehicles, UAVs, soft skinned vehicles and PGMs.	
(j)	What is the elevation and depression of the main armament on the offered platform?	Should be capable of High Angle fire.	
(k)	What type of ammunition loading provision are on the platform offered?	Auto-Loader.	
(l)	What kind of weapon control arrangements are existing on the platform	Automotive and Gun Control System and any other system/ sub-system which enhances the operational and employability of the platform.	
(m)	What are the specification of the day and night vision devices on the platform offered?	High Detection Recognition and Identification Ranges with thermal night fighting capability.	
<u>SURVIVABILITY</u>			
(n)	What is the maximum all round passive protection of the platform offered?	STANAG Level of all round passive protection including top, bottom, sides and frontal.	
(o)	What are the measures available for secondary protection on the platform offered?	Explosive Reactive Armour (ERA), Soft Kill Measures, Chemical Biological Radiological Nuclear (CBRN) Protection & Instant Fire Detection and Suppression System (IFDSS).	

<u>SER NO</u>	<u>PARAMETERS</u>	<u>SPECIFICATIONS</u>	<u>VENDORS RESPONSE</u>
(p)	What are the ammunition stowage arrangements on the offered platform?	Containerised compartments, with suitable safety of blow out provisions.	
(q)	What are the stealth and signature management arrangements available on the offered platform?	To suppress visual, audio/acoustic, thermal and electro-magnetic signatures.	
(r)	What are the systems/ sub-systems available for situational awareness on the platform offered?	Systems to provide day and night high resolution, high field of view and continuous and integrated 360 ⁰ real time situational awareness for the crew members.	
<u>MOBILITY</u>			
(s)	What is the power to weight ratio of the platform offered?	Not less than 25:1 horse power/ton.	
(t)	What is the nominal ground pressure of the platform offered? Does it possess the trafficability in all kind of terrain?	To be able to operate in marginal terrain/ wetland soft soil.	
(u)	What will be the maximum operational range in different terrain configuration with internal fuel capacity of the platform offered?	Operational ranges in cross country and on road	
(v)	Does the platform offer fording capability, if yes than details of the capabilities?	Essential	

<u>SER NO</u>	<u>PARAMETERS</u>	<u>SPECIFICATIONS</u>	<u>VENDORS RESPONSE</u>
(w)	Does the platform offers amphibious capability? If yes, amplify the provision for it.	Desirable.	
(x)	What is the maximum speed the platform can attain, both on and off road?	Maximum speeds to include reverse speed.	
(y)	What type of power pack is installed on the platform?	High engine life with transmission system.	
(z)	What type of suspension is available on the platform?	Should provide a stable weapon platform to achieve first round hit probability in varying terrain.	
<u>COMMUNICATION</u>			
(aa)	What are the arrangements and specifications for inter and intra communication in the offered platform.	Issues of compatibility with in-service radio sets and secrecy to be addressed.	
(ab)	What measures are available on the platform for electronic warfare?	Offensive and defensive electronic countermeasures (ECM) and counter-countermeasures (ECCM).	
<u>WHAT OTHER CAPABILITIES ARE OFFERED ON THE PLATFORM?</u>			
(ac)	Does active protection system integrated on the platform?	Hard and Soft kill.	
(ad)	Does the platform offers battlefield management system? If yes, details of the system.	BMS integrated with Fire Control System.	
(ae)	What type of navigation system will be offered on the platform?	Hybrid Navigation System.	

<u>SER NO</u>	<u>PARAMETERS</u>	<u>SPECIFICATIONS</u>	<u>VENDORS RESPONSE</u>
(af)	What are the artificial intelligence and autonomous military technologies available on the offered platform?	Performance optimization , Decision support, trust based network and Weapon systems and target / surveillance systems	
(ag)	Any other special systems available on the offered platform to enhance the overall operational capabilities?	Auxiliary Power Unit, Preheater, Environment Control Unit and Anti Drone capability, UAV Jammers, Net Enabled (UAV feed).	
(ah)	For some operational requirements, a wheeled version of Light Tank may be required. Hence, can modularity be provided and does the technical feasibility exists of providing both tracked Light Tank and some limited number of wheeled Light Tank as a variant of the same product.	Variant for different operational requirements.	

3. In addition to above, the prospective Original Equipment Manufacturers would be allowed to offer higher performance parameters and new generation technologies.

VENDOR INFORMATION PROFORMA

1. **Name of the Vendor/Company/Firm.**

(Company profile, including Share Holding Pattern in Brief, to be attached)

2. **Type (Tick the relevant category).**

Original Equipment Manufacturer (OEM)

Yes/No

Authorised Vendor or foreign Firm

Yes/No (attach details, if yes)

Others (give specific details)

3. **Contact Details.**

Postal Address:

City: _____

State: _____

PIN Code: _____

Tele: _____

Fax: _____

URL/ Web Site/ E-mail: _____

4. **Local Branch/ Liaison Office/Agent (if any).**

Name & Address: _____

PIN Code: _____ Tele: _____ Fax: _____

E mail _____

5. **Financial Details.**

(a) Category of Industry (Large/Medium/Small Scale) : _____

(b) Annual Turnover _____ (in INR)

(c) Number of employees in firm _____

(d) Details of manufacturing infrastructure _____

(e) Earlier contracts with Indian Ministry of Defence/Government agencies

6. **Certification of Quality Assurance Organisation.**

<u>Name of Agency</u>	<u>Certification</u>	<u>Application from (Date & Year)</u>	<u>Valid till (Date & Year)</u>

7. **Details of Registration.**

<u>Agency</u>	<u>Registration No</u>	<u>Validity (Date)</u>	<u>Equipment</u>

8. **Member of FICCI/ASSOCHAM/CII or other Industrial Associations.**

Name of Organisation

Membership Number

9. **Equipment/Product Profile (to be submitted for each product separately.**

(a) Name of Product _____

(IDDM Capability be indicated against the product)

(b) Description (attach technical literature): _____

(c) Whether OEM or Integrator _____

(d) Name and address for Foreign collaboration (if any) _____

(e) Industrial License Number: _____

(f) Indigenous component of the product (in percentage) : _____

(g) Status (in service/design & development stage) : _____

(h) Production capacity per annum: _____

(j) Countries/agencies where equipment supplied earlier (give details of quantity supplied). _____

(k) Estimated price of the equipment _____

10. Alternative for meeting the objective of the equipment set forth in the RFI.

11. Any other relevant information: _____

12. **Declaration.** It is certified that the above information is true and any changes will be intimated at the earliest.**Note:** Para 51 and Appendix F to Chapter II may be referred**(Authorised Signatory)**