REQUEST FOR INFORMATION (RFI) : HIGH MOBILITY VEHICLE 8X8 GENERAL SERVICE (PRIME MOVER FOR TRAILER 70 TON TANK TRANSPORTER)

1. The Ministry of Defence, Government of India, intends to procure approximately **36 x High Mobility Vehicle 8x8 GS (Prime Mover for Trailer 70 Ton Tank Transporter)**. The vehicle will be used for transportation of Trailer 70 Ton Tank Transporter loaded with medium, heavy tanks weighing upto 70 Tons on metalled roads and tracks. The vehicle will be provided with 8x8 drive and be capable of operating as a General Service High Mobility load carrier with payload capacity of not less than 12 Tons in plains, deserts and cross country conditions prevalent in the country within a temperature range of 0^0C to 45^0C. The platform should facilitate modification for other uses including troop carriage, containerization and for specialist roles.

2. This RFI consists of two parts as indicated below:-

(a) **Part I**. The first part of the RFI incorporates operational parameters and broad technical requirements that should be met by the equipment and tentative date of issue of the RFP and the quantity required to be procured. Few important technical parameters of the proposed equipment are also mentioned.

(b) **Part II**. The second Part of the RFI states the methodology for seeking response from vendors. Submission of incomplete response will render the vendors liable for rejection.

PART - I : OPERATIONAL PARAMETERS AND BROAD TECHNICAL REQUIREMENTS

3. **Operational Parameters**.

(a) The vehicle should employ contemporary technology in all its systems to deliver optimum performance and reliability.

(b) **Vehicle Dimensions and Weight**. The overall dimensions and weight of the vehicle should allow it to go across a bridge classification of **Class-70R of IRC:6-2014** when towing a trailer loaded with payload of 70 Ton.

(c) The vehicle should have a facility for easy and quick conversion to flat bed configuration by removal of side walls, super structure and tail board. The vehicle should have locking arrangements for container transportation.

4. **Broad Technical Requirements**.

(a) **Engine**. The vehicle engine will have the following characteristics:-

(i) **Type of Engine**. Contemporary Turbocharged Diesel Engine meeting **BS III norms**.

(ii) **Engine Output**. The engine output will not be less than 300 KW. The engine power should enable the vehicle to haul a GCW in the range of 115 to 125 Ton over a gradient of 7^0. The GCW includes the in-service trailer having un-laden weight of not more than 28 Ton, MBT Arjun Mk-I 62.5 ton or Mk-IA 68 ton and the weight of the Prime Mover with the counter weights (ballast weights) as recommended by the OEM.

(iii) **Fuel Efficiency**. The vehicle should be fuel efficient and economical to operate when hauling a Gross Combination Weight (GCW) in the range of **115 to 125 Ton** under test conditions.

(iv) **Average Engine Life**. Average engine life should not be less than **1,50,000 km/ 11 years** whichever is earlier.

(v) The overall design should be modular for ease of replacement.

(b) **Power Train**.

(i) The transmission system should be all time **8x8 Manual/AMT**. Differential lock facility will be provided on all axles. Facility of inter axle differential lock will also be provided. Engagement of high/ low gear and differential lock to be possible from the driver's cabin.

(ii) Power Take Off arrangement will be provided on the gear box/transfer case.

(iii) A winch mechanism will be provided to facilitate loading of an unserviceable tank on the trailer.

(c) **Brake System**. The vehicle should have a contemporary brake system with ABS. In addition to the Service brakes, Emergency, Parking and Exhaust brakes should be provided. Parking brake must be able to hold the vehicle on all gradients which it is capable of negotiating. Brakes to comply with latest IS applicable at the time of trials. A twin circuit brake system will be provided for towing the trailer.

(d) **Hill Assist Feature**. A Hill Assist Feature will be provided to prevent vehicle roll back on steep gradient.

(e) **Suspension**. Suspension system will be based on semi-elliptical multi leaf springs and parabolic bogie mechanism or better system.

(f) **Steering System**. Vehicle should have Right Hand Drive with adjustable tilt and telescopic Power Steering. Emergency power steering will be provided to enable steering of vehicle when engine power is switched off.

(g) **Cabin and Body**. The vehicle cabin shall be based on fully forward control design. The cabin will be hydraulically tiltable. A self adjusting hydraulic/pneumatic seat will be provided for the driver. Co-driver seat will be manually adjustable. Three point seat belts will be provided for both the seats. A berth type seat to be provided behind the driver and co-driver seats. The cabin will be fitted with Heating, Ventilation and Air Conditioning system. The cabin will have provision for central locking. The load body should be having a light super structure which is easily removable with a canvas top. It should have adequate storage space for counter weights (ballast weights) and carriage of general service loads.

(h) **Central Tyre Inflation System**. Central Tyre Inflation/deflation System will be provided for dynamic inflation/ deflation of tyres to maintain the rated tyre pressure.

(j) **Camouflage and Concealment**.

(i) The vehicle should have as low a silhouette as the physical characteristics permit.

(ii) Provision will be made for carriage of camouflage nets and poles. Brackets shall be provided at suitable places with which posts/ poles of camouflage net can be fitted.

(k) **Stowage Facilities**. Rifle racks to be provided for driver, co-driver and crew members in the driver compartment. Stowage arrangements for two Showels and Pick axes, camouflage net poles, 5 litre oil can and eight x 20 litres jerricans (for spare fuel) to be provided. A 150 litre capacity SS water tank will also be provided.

(l) **Vehicle Performance Parameters**. The vehicle to preferably have the following capability :-

(i) **Gradeability**.

(aa) Not less than 7^0 with 125 Ton Gross Combination Weight (Re-start gradeability).

(ab) Not less than 30^0 with payload of 12 Tons.

(ii) **Side-Slope Stability**. Not less than 30^0 with payload of 12 Tons.

(iii) **Turning Circle Diameter**. 25 m $\pm$ 0.5 m

(iv) **Ford-ability**. Min 1200 mm with stop and Min 1400 mm pass (with preparation)

(v) **Ground Clearance**. 400 mm $\pm$ 30 mm in laden condition.

(vi) **Angle of Approach**. $30^0 \pm 2^0$ in laden condition.

(vii) **Angle of Departure**. $35^0 \pm 2^0$ in laden condition.

(viii) **Power to Weight Ratio**. Not less than 12 KW/Ton with payload of 12 Ton.

(ix) **Ditch Crossing Ability**. Not less than 2000 mm

(x) **Vertical Step Climbing Ability**. Not less than 600 mm

5. Vendors should confirm that the following conditions are acceptable : -

(a) The solicitation of offers will be as per **'Single Stage-Two Bid System'**. It would imply that a **'Request for Proposal'** would be issued soliciting the technical and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the date of submission of offers.

(b) The technical offers would be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.

(c) **Trials**. Post technical evaluation, the equipment will be put through a Field Evaluation Trial (FET) in India on a **'No Cost No Commitment'** basis. Trial timelines will be provided in 'Trial Directive' post issue of RFP. One vehicle will be provided for the FET process which would comprise of :-

(i) Desert trials in summer.

(ii) MET (Maintainability Evaluation Trials).

(iii) DGQA evaluation.

(d) A General Staff evaluation would be carried out by Service Headquarters to analyze the result of field evaluation and shortlist the equipment for introduction into service.

(e) Amongst the vendors cleared by General Staff evaluation, a Contract Negotiation Committee would decide the **lowest cost bidder** (L1) and conclude the appropriate contract.

(f) Vendors would be accountable to provide Product Support (on chargeable basis) for time period specified in the RFP, which would include spares and maintenance tools/ jigs/ fixtures for field and component level repairs.

(g) The vendor would be required to accept the general conditions of contract given in the **Standard Contract Document at Chapter-VI of DPP-2016**.

(h) **Integrity Pact (if applicable)**. An integrity pact along with appropriate Bank Guarantee is a mandatory requirement as per Annexure-I to Appendix M of Schedule-I (RFP Format) of DPP-2016.

(j) **Performance-cum-Warranty Bond**. A Performance-cum-Warranty Bond of 10% of value of the contract would be furnished by the seller in the form of a Bank Guarantee after signing of the contract.

(k) **ESP**. The vendor should provide an Engineering Support Package for management of repairs and spares post contract giving details of facilities and availability of infrastructure in India so that repair & service needs can be attended in the area of employment of the vehicles.

(l) **Delivery**. The tentative delivery schedule for supply of the equipment after conclusion of contract will be based on delivery at different locations within the country with numbers specified.

(m) Vendors may be advised to consider RFI as advance information to obtain requisite government clearances.

6. The parameters/broad specifications of the equipment are sought in the questionnaire attached as per **Appendix 'A'**. The vendors are required to respond to the same.

PART - II : PROCEDURE FOR RESPONSE

7. Vendors must respond to the Questionnaire as per **Appendix 'A'** attached giving maximum possible details. The vendors must also fill the form of response as per **Appendix 'B' of Chapter- II of DPP 2016** attached to this RFI as **Appendix 'B'**. Apart from giving details about the company, details about the specific product, generic technical specifications should also be indicated. Additional literature on the product can also be attached with the form.

8. The filled form should be dispatched at the under mentioned address: -

Directorate General of Supplies and Transport (ST-11)
QMG Branch, Room No 323, 'A' Wing, Sena Bhawan
Integrated HQ of MoD (Army)
DHQ, PO-New Delhi-110011
Tele Number – 011-23018592
NIC Mail ID – dirtpt-ihq@nic.in

Directorate General of Weapons and Equipment (WE-13/14)
General Staff Branch, Room No 441, 'A' Wing, Sena Bhawan
Integrated HQ of MoD (Army)
DHQ, PO-New Delhi-110011

Directorate General of Weapons and Equipment (RFP Cell)
General Staff Branch, Room No 444, 'A' Wing, Sena Bhawan
Integrated HQ of MoD (Army)
DHQ, PO-New Delhi-110011
Fax No : 011-23012794

Directorate General of Perspective Planning (GSQR Cell)
General Staff Branch, Room No 122, 'A' Wing, Sena Bhawan
Integrated HQ of MoD (Army)
DHQ, PO-New Delhi-110011
Fax No : 011-23014742

Technical Manager (Land System)
Room No 28, D-II Wing, Sena Bhawan
Ministry of Defence,
DHQ, PO-New Delhi-110011
Fax No : 011-23792414

9. Last date of acceptance of filled form is _____**2020** (**Six weeks** from hosting of RFI on MoD website through ADG PI). The vendors shortlisted for issue of RFP would be intimated separately.

10. Vendor interaction may be planned if considered necessary.

11. The Government of India invites responses to this request only from Indian OEM/Authorised Vendors. The end user of the equipment is the Indian Army.

12. This information is being issued with no financial commitment to procure the said equipment 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 this RFI, should it be so necessary at any stage. The acquisition process would be carried out under the provisions of **DPP- 2016**.

Appendix A
(Refers to Para 6 of RFI)

QUESTIONNAIRE

Note: Please provide all relevant details and technical specifications to the extent possible. Compliance to relevant Automotive Industry Standards (AIS)/CMVR norms may be mentioned quoting the relevant specification/ standard number in your reply.

S No	Specification/Parameter	Reply
1.	**Engine**. (a) What is the type of engine provided? How many cylinders are provided? How are they arranged? Give the swept volume of the engine in cubic cm (cc)? (b) What is the max power output in KW and BHP? Specify the engine rpm at which the power output is achieved. (c) What is the maximum Torque achieved by the engine in Nm and at what rpm? (d) Is the engine power output and Torque generated adequate to haul a GCW of 125 Ton over a gradient of 7^0? (Re-start gradeability). If not, what is the engine power output and Torque recommended by you to meet this requirement? (e) What emission norms does the vehicle comply with? Can a vehicle meeting BS-III emission norms be provided? (f) What is the type of fuel used? What BS norms does the fuel have to comply with? (g) List out the types/grades of coolant, oils/ lubricants and greases with quantity recommended for use in the vehicle and specify the assembly where applicable? (Specify **standard nomenclature** of grades without any brand name). (h) What is the average life of engine in years and Km? (j) What is the mileage achieved by the vehicle in Km/ litre when towing a trailer loaded with payload of 70 Ton under test conditions?	
2.	**Transmission System**. (a) What type of transmission system will the vehicle have? Give the number of gears provided. Can high/low gear ratios be provided? How are the gear ratios activated? Elaborate. (b) Can an Automated Manual Transmission system be provided? Elaborate.	

S No	Specification/Parameter	Reply
	(c) Does the vehicle have permanent 8x8 drive or selectable drive options are available. If selectable drive options are provided, how are they activated? Elaborate. (d) Can liftable axles be provided? Elaborate. (e) Is a differential lock available on all axles? How is it activated? Elaborate. (f) Is an inter axle differential lock provided? How is it activated? Explain the working of the system and its advantages. (g) Can Hub reduction feature be provided in the live axles for better tractive effort in cross country driving? Elaborate. (h) Can a winch mechanism be provided to facilitate loading of an unserviceable tank on the trailer? How is it operated? Specify the pulling capacity of the winch rope in KN and Ton. (j) What is the length and diameter of winch rope provided?	
3.	**Steering System**. (a) What is the type of steering system provided? (b) Is there any provision of emergency power steering in the vehicle? (c) Can an adjustable (Tilt and Telescopic) steering be provided?	
4.	**Brakes**. (a) Elaborate upon the type of brakes provided :- (i) Service Brakes. (ii) Parking Brake. (iii) Exhaust Brake. (iv) Emergency Brake. (b) Can an Anti-Lock Brake System (ABS) be provided? (c) Is a twin circuit brake system provided for towing the trailer? (d) What is the braking efficiency and braking distance with full payload at cruising speed? (e) At what gradient will the parking brake be able to hold the vehicle with full payload? (f) Can a 'Hill Assist Feature' be provided to prevent vehicle roll back on steep gradient? How is it activated? At what maximum gradient will it be effective?	

S No	Specification/Parameter	Reply
5.	**Cooling System**. (a) What is the type of cooling system provided? (b) What is the Ideal & Max cooling temp? (c) What is the operating temperature range?	
6.	**Suspension**. (a) The vehicle in General Service role would have to operate cross country and on poorly developed roads and tracks. Keeping the road conditions in mind, what is the type of suspension system provided in the vehicle. (b) Does it comply with any CMVR norms? Please elaborate.	
7.	**Electrical System**. (a) How many batteries does the vehicle have? What is the Battery type, voltage and capacity ? Can maintenance free battery(ies) be provided? (d) Can a Battery Isolating Switch be provided? (c) What is the type of wiper motor? Can a variable speed wiper motor be provided? (d) Is there a provision of wind screen washing? (e) Is a demister provided for the front wind screen? (f) Can an electrical and pressure horn with change over switch be provided? Can a siren/hooter be provided? (g) **Additional Lighting Arrangements**. (i) What is the type of Head Lamps provided in the vehicle? Can LED lights be provided? (ii) What is the type of Tail Light Assembly provided? (iii) Can turn indicators be provided on the front, rear and sides. (iv) Can the under mentioned lights / sockets be provided? Amplify against each : - (aa) Cabin Light. (ab) Light for Engine Compartment. (ac) Blinkers for indication of front and rear on cabin roof.	

S No	Specification/Parameter	Reply
	(ad) Blackout head, tail & stop lamp with change over from normal to blackout driving. (ae) Fog Lights. (af) Map reading light on the dash board. (ag) Light socket in the rear for trailer lights. (ah) A charging socket on the dash board. (aj) A beacon light on the cabin roof. (v) Can the normal lighting system be made in-operative when the blackout lights are put on?	
8.	**Starting System**. What is the type of starting system provided in the vehicle?	
9.	**Towing Arrangements**. (a) What are the towing arrangements provided in the front of the vehicle? (b) What is the towing arrangement provided for towing a full trailer loaded with a payload of 70 Ton? Is the towing mechanism compatible with a draw bar with swiveling type eye bolt?	
10.	**Dimension**. (a) Specify the Length, Width, Height and Wheel Base of the vehicle? (b) What is the height of the loading platform?	
11.	**Cabin and Body**. (a) What would be the design of the cabin with respect to the engine ie (fully forward/semi forward)? (b) How is the Driver's Cabin mounted on the Chassis? Specify the number of mounting points. Is there any suspension mechanism provided in the mounting? Please elaborate. (c) What Cabin tilting arrangements are provided in the vehicle? Can a hydraulic arrangement be provided to minimise effort? (d) What is the type of Windscreen provided? (e) Can a central locking system be provided?	

S No	Specification/Parameter	Reply
	(f) How many doors will the cabin have? Can power windows be provided? (g) Explain the seating arrangements for the driver and co-driver. Can height adjustable, reclining and laterally movable seats with integrated head rest be provided? Do the seating arrangements confirm to any IS norms? (h) Can self adjusting hydraulic / pneumatic seats be provided for the driver to reduce fatigue? (j) What is the type of seat belts provided for the safety of driver/ co-driver? (k) Can bench/berth type seats be provided behind the driver and co-driver seats to sleep driver, co-driver and crew members? (l) What arrangements can be made to provide better ergonomics for crew comfort? Elaborate. (m) Is there a provision of observation hatch above the co-driver seat in the cabin? Are locking arrangements provided for the hatch? (n) Can a portable dry chemical powder type fire extinguisher be fitted in the driver's compartment? (o) Can collapsible side/ tail boards be provided in the load body ? Does the tail board design facilitate easy mounting and dismounting by troops? Elaborate. (p) What arrangements are provided for covering the load body ? Is the super structure easily removable? Can the height be increased / adjusted? Does the canopy have enough scope for ventilation? Elaborate. (q) Can a flat load body floor (without wheel arches) be provided? (r) Can collapsible bench type seats with back rest be provided in the load body along the side boards? How can these seats be made comfortable as well as durable? Can a seat belt be provided for the *Danda Man*? (s) Can a buzzer/bell be provided near the Dandaman seat to alert the driver? (t) Is there is requirement of carrying ballast load in the load body for improving traction while towing a loaded trailer? What is the recommended ballast weight? Can the ballast weights be provided? (u) Is the vehicle fitted with Heating, Ventilation and Air Conditioning (HVAC) system for the driver cabin? Please provide details of the system and give heating/ cooling capability with respect to the ambient temperature. Can the HVAC system carry out windscreen demisting?	

S No	Specification/Parameter	Reply
12.	**Tyres**. (a) What is the type and size of tyres recommended for the vehicle? (b) Are the tyres indigenous or imported? (c) **Central Tyre Inflation System**. Can a Central Tyre Inflation/deflation System be provided for dynamic inflation/ deflation of tyres to maintain the rated tyre pressure? How is it activated? Explain the type of system that can be provided with advantages and disadvantages.	
13.	**Stowage Facilities**. (a) Can the following Stowage facilities be provided: - (i) Rifle racks for driver and co-driver and crew members in the driver compartment. (ii) 150 litre capacity SS water tank with tap and PUF insulation. (iii) Tool Box for tools and spare parts. (iv) Glove compartment / Dash board with locking arrangement. (v) Stowage arrangements for two Showels and Pick axes each. (vi) Stowage arrangements for camouflage net poles. (vii) One 5 litre Oil Can. (viii) Eight, 20 litres Jerricans (for spare fuel). (b) Explain the stowage mechanism for spare tyre?	
14.	**Vehicle Performance Parameters**. The veh will be utilized to tow a loaded trailer weighing not more than 98 (Tank - 70 Ton & Trailer 28 Ton). In the GS role, the will be required to carry a payload of 12 Ton in cross country terrain. In light of the above, provide under mentioned details :- (a) What would be the un-laden weight of the vehicle? (b) What is the GVW with 12 Ton payload? (c) What is the recommended counter weight to haul a trailer loaded with 70 Ton payload (total load not more than 98 Ton).	

S No	Specification/Parameter	Reply
	(d) **Gradeability at Full load**. (i) What would be the gradeability of the vehicle when towing a loaded trailer with a GCW of 125 Tons? (aa) **Running gradeability**. (in degrees) (ab) **Re-start gradeability**. (in degrees) (ii) What would be the gradeability of the vehicle with a payload of 12 Ton? (aa) **Running gradeability**. (in degrees) (ab) **Re-start gradeability**. (in degrees) (e) **Side-Slope Stability**. What is the side-slope stability of the vehicle? (Give figures in degrees). (f) **Vehicle Speed**. What would be the maximum vehicle speed on level metalled highway :- (i) With loaded 70 Ton Trailer. (ii) With 12 Ton payload. (g) **Range of Operation**. (i) How many fuel tanks does the vehicle have? Give their capacity. Can the fuel tanks be provided with integrated locking mechanism? (ii) Can a Polymer based Fuel tank be provided? Enumerate advantages and disadvantages. (iii) What is the fuel consumption of the vehicle in Km/litre :- (aa) In Prime Mover role with GCW of 125 Ton. (ab) In GS role with a payload of 12 Ton. (iv) What is the maximum distance covered by the vehicle on full fuel tank :- (aa) In Prime Mover role with GCW of 125 Ton. (ab) In GS role with a payload of 12 Ton.	

S No	Specification/Parameter	Reply
	(h) **Turning Circle Diameter**. What is the turning circle diameter of the vehicle? (j) **Ford-ability**. What is the fording capability of the vehicle without any preparation? (k) **Ground Clearance**. What is the ground clearance of the vehicle in fully laden condition? (l) **Angle of Approach**. What is the angle of approach? (m) **Angle of Departure**. What is the angle of departure? (n) **Power to Weight Ratio**. What is the power to weight ratio in KW/ Ton? (o) **Ditch Crossing Ability**. What is the ditch crossing ability of the vehicle? (in mm) (p) **Vertical Step Climbing Ability**. What is the vertical step climbing ability of the vehicle? (in mm)	
15.	**Weather Proofing**. Will all sub assemblies of the vehicle be capable of withstanding extreme weather conditions in the temperature range of **0^0C to 45^0C?** What measures will be provided to withstand high humidity and dust?	
16.	**Reverse Camera**. Can a reverse camera with integrated display panel in the driver's compartment be provided? Can an audio alarm with sensors be incorporated with the Camera?	
17.	**Outside Rear View Mirror**. What are the type of outside rear view mirrors provided in the vehicle? Can the ORVM be provided with side indicators? Can additional mirrors be provided to reduce 'Blind Spots'? Specify.	
18.	**Air Bags**. Are air bags mandatory for this category of vehicle as per CMVR norms. Can air bags be provided for the driver and co-driver?	

S No	Specification/Parameter	Reply
19.	**Instrument Panel**. (a) What is the type of instrument panel provided? (b) What are the types of switches provided? (c) Can a Trip Meter be provided? (d) Specify the gauges / meters that will be provided in the instrument panel? (e) Can audio / visual alarm be provided on the instrument panel to indicate the following aspects:- (i) High Coolant Temperature. (ii) Low Oil Pressure. (iii) Low Air Pressure (for Brake System). (iv) Low Fuel Level. (v) Hand Brake operation. (vi) Door Ajar Indicator. (vii) Seat Belt usage. (viii) Battery not charging.	
20.	**Tools and Accessories**. List out the tools and accessories provided with the vehicle.	
21.	**Maintenance Philosophy**. (a) What would be the Maintenance philosophy for repair and maintenance of the vehicle? Can it be aligned with the system of unit and Field level repairs prevalent in the Defence Services? (b) Would the vehicle have interoperability with the present fleet of in-service vehicles? Please elaborate. (c) What would be the infrastructure & skill sets needed for maintenance. (d) What would be the training requirement for maintenance of the vehicle at unit and field level? (e) Will you be providing spares, Special Maintenance Tool and Special Test Equipments for carrying out component level repair? (f) Will you be providing AMC for repair and calibration cover for Special Maintenance Tools and Special Test Equipment?	

<table>
<tr><th>S No</th><th>Specification/Parameter</th><th>Reply</th></tr>
<tr><td></td><td>(g) <u>Upgradation Philosophy</u>.

(i) What would be the upgradation philosophy with respect to the vehicle?

(ii) Elaborate upon the frequency and nature of upgrades recommended by you.

(iii) Will software upgrades/patches be provided whenever required?

(h) <u>Product Support</u>.

(i) What kind of ‘Product Support’ will you ensure? What will be ‘Time Period’?

(ii) Does the company have major repair and overhaul facility for major assemblies and component level repair?

(iii) What kind of ‘Engineering Support Package’ will you be offering?

(iv) What type of AMC will be provided? What would be the likely Cost?

(v) What life time support can be provided by the vendor?</td><td></td></tr>
<tr><td>22.</td><td><u>Oil & Lubricants</u>.

(a) What are the oils and lubricants recommended for the vehicle? Provide the requirement as per table below :-

<table>
<tr><th>Ser No</th><th>Purpose Oil/Lubricants required for</th><th>Compliance with IS specification</th><th>ISO/SAE Grade of Oil/Lubricant</th><th>API Performance Level</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
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*Equivalent grade available with oil PSUs may be suggested.
*Proprietary products are not to be recommended.

(b) Are the oil and lubricants commercially available indigenously?</td><td></td></tr>
</table>

S No	Specification/Parameter	Reply
23.	**Training**. (a) Can training be provided for the drivers / personnel carrying out repair and maintenance of the vehicle? (b) What is the recommended training period of maintenance and QA persons and user/crew? (c) Can sectionised cut models of major assemblies, CBT packages, Training Charts and other Training related reference material be provided ? Please specify. (d) What are the facilities available at OEM/ Vendor premises to conduct training? (e) Will you provide soft copies of the 'User Handbook' and other manuals including technical manuals along with the CBT for training?	
24.	Is the equipment available in Indian market? What is the level of indigenization, maintenance support and life time support?	
25.	**Indigenous Content/ Production**. (a) Elaborate upon the capability to indigenously design, develop and manufacture the equipment (IDDM capability)? If yes, what will be the percentage of Indigenous Content provided & verification process? (b) What are the critical technologies which the industry has taken from their global partners or Joint Venture, if any? Or what are the essential critical technologies which are required to be obtained? (c) How much time will the startup / Joint Venture take to start production? (d) Does the Indian Industry have the capability to design, develop, manufacture, test and integrate the system including the critical technology? (e) Do you have Industrial Licenses for the production of the vehicle? If not, have you applied for the same and when (date) and by which it is likely to be granted? (f) How much time is required by the Industry to deliver the equipment / platform with the stipulated indigenous content, post trials/ contract for operational use?	

S No	Specification/Parameter	Reply
26.	**<u>Trials/ Prototypes.</u>** (a) Is the prototype readily available or has to be designed / manufactured ? (b) What will be the time penalty and fall out if additional features / higher technology is asked in the prototype? **OR**, If the equipment is to be fielded in 4 months/ 6 months, what level of technology (or type of prototype) would be made available? (c) What is the likely time period required to field the prototype for trials post intimation of clearance in TEC? This date should factor in time for clearance, transportation etc. (d) Are you willing to participate in trials as per DPP-2016 in India on 'No Cost No Commitment (NCNC)' basis? (e) What is the suitability of equipment for deployment in various types of terrains in India? Specify separately for deserts, plains, mountainous, High Altitude Area. (f) Whether crew required for operating the equipment for user trials shall be provided by the vendor? (g) Whether vendor certification can be given for major parameters eg operating temperature and weather conditions etc?	
27.	Please furnish details of IPR documentation / patents / design resignation / copyright etc registered with the authorised agency in respect of the vehicle.	
28.	Is the complete set of design and production drawing and source code for all software applications/ programmes available with your company? Can they be produced for verification?	

S No	Specification/Parameter	Reply
29.	**<u>Commercial Terms / Cost.</u>** (a) Specify the elements which need to be structured in the costing of the vehicle (including comprehensive maintenance / product support package). (b) What will be the estimated price of the complete vehicle? (c) What will be the estimated cost of the 'Equipment Support Package (ESP)' recommended by the OEM / Vendor? (d) Elaboration of Total cost indicating following aspects :- (i) Basic Cost per unit (ii) ESP @ 15% (iii) Total (a+b) (iv) GST @ ___% of basic cost of veh (v) **Total Cost per unit (including above)** (e) What INCOTERMS 2010 are suitable/ preferred by your company and for what reasons? (Global & Indian vendors) ? (f) What is your preferred mode of shipment of vehicle – rail, road, sea or air/ or a combination?	
30.	**<u>Production Capacity</u>**. (a) What is your annual production capacity? Is it likely to increase? (b) How much time is required by you to deliver the equipment after conclusion of contract?	
31.	**<u>Vendor Selection Criteria</u>**. (a) Is the applicant entity an Indian Company as defined under the Companies Act 2013? (b) Has the applicant entity or any of its allied entities ever been banned or suspended by the MoD/SHQ or any Government Department or Organisation? Details of vigilance action viz ongoing investigations by any department/ agency of Central Government may be provided. (c) Is the applicant entity a Manufacturing Entity or System Integrator or a Trading Company? (d) Does your company have any previous experience/expertise in this field? Specify the field or expertise/experience of your company and the duration of experience in years.	

S No	Specification/Parameter	Reply
	(e) Specify the turnover and networth of your Company in the last three (03) years. (f) Is your company under insolvency resolution as per Indian Bankruptcy Code? (g) What is the Credit Rating of your Company equivalent to CRISIL rating? (h) Does your Company qualify under Start Up or MSME Category ?	

Appendix 'B'

INFORMATION PROFORMA (INDIAN VENDORS)

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

_____

_____

(Company profile including Share Holding pattern, in brief, to be attached)

2. **Type (Tick the Relevant Category)**.

(a) Original Equipment Manufacturer (OEM) : Yes/No

(b) Authorised Vendor of foreign Firm : Yes/No (attach details, if yes)

(c) Others (give specific details)

_____

_____

3. **Contact Details**.

Postal Address : _____

_____

City :_____ State :_____

Pin Code :_____ Tele :_____

Fax :_____ URL/Website:_____

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

Name &Address : _____

_____

Pin Code :_____ Tele :_____

Fax :_____

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 :-

Contract Number	Equipment	Quantity	Cost

6. **Certification by Quality Assurance Organisation**.

Name of Agency	Certificate	Applicable from (Date and Year)	Valid Till (Date & Year)

7. **Details of Registration**.

Agency	Registration No	Validity (Date)	Equipment
GeM/CPP			
DGQA/DGAQA/DGNAI			
OFB			
DRDO			
Any other Government Agency			

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

(a) **Name of Organisation**

(b) **Membership Number**

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

(a) Name of Product : _____

(IDDM Capability be indicated against the product)
(Should be given category wise for e.g. all products under night vision devices to be mentioned together)

(b) Description (attach technical literature) :_____

(c) Whether OEM or Integrator : _____

(d) Name and address of Foreign collaborator (if any): _____

(e) Industrial License Number : _____

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

(g) Status (in service/ design and 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. Alternatives for meeting the objectives 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.

(Authorised Signatory)

(As per DPP-2016)