



GOVERNMENT OF INDIA
MINISTRY OF DEFENCE
ORDNANCE FACTORY BOARD
VEHICLE FACTORY JABALPUR
MADHYA PRADESH STATE

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No.: 33/ ODC /Mini Truck /17

Date.: 18-05-2017

Sub:- Expression of interest (EOI) for technical collaboration and Transfer of Technology for manufacturing of "Mini-Truck" in India.

The Ministry of Defence, Government of India is planning to procure approximately 2958 nos. Mini Truck (Generic nomenclature of equipment). The vehicle is primarily to use as a load carrier of pay load capacity 900-1200 kg in all types of terrain. It should be 4x4 drive capable of co-operation in different terrain and climatic conditions prevalent in the country by the use of Indian Army, The platform should facilitate modification for other users including small troop carriage, specialist roles viz. reconnaissance and weapons platforms including containerisation capable to operate on highways and cross-country.

Vehicle factory Jabalpur(VFJ), a production unit under Ordnance Factory Board(OFB),Ministry of Defence, Government of India is manufacturing transport vehicles for Indian Army in the range of 5/7.5 Ton and 2.5 Ton 4x4 Trucks.

Vehicle Factory is looking partner for technical collaboration for co-manufacture in India. For the same transfer of technology may be executed by perspective partner.

Interested and capable global OEMs(Original Equipment Manufacturer) willing to work with Vehicle Factory Jabalpur is requested to respond by e-mail/post/fax by **15-07-2017** as below:-

E-mail address	odc-vfj.ofb@ofb.gov.in
Fax number	+91 7612330436
Postal address	The Sr. General Manager Kind attn:- Shri.Vikas Purwar Director-ODC Vehicle Factory Jabalpur Madhya Pradesh, India-482 009
Contact Phone no.	+91 7612792021 & +91 7612332014

Brief operational and technical parameters along-with terms and conditions are attached here in and also available at website <http://www.tenders.gov.in> .

Any amendment including extension of last date for response of this EOI will be available in the above web site.

Vikas
(Vikas Purwar)
Director/ODC
Vehicle Factory, Jabalpur

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PART - I: GENERAL REQUIREMENTS

1. The Respondent should be the OEM of the System or government designated agency of the country of OEM.
2. The System being offered should be in-service with any army of the world.
3. The Respondent must confirm that in case it is selected for technical collaboration agreement with OFB for manufacture and supply of Mini-Truck, it will not enter into any agreement with any other Indian Company participating in MoD India RFP for same/similar product. If selected, the respondent will need to sign an agreement with OFB to that effect.
4. The Respondent should not have been debarred, banned, suspended or blacklisted by the Ministry of Defence, India at the time of opening date of EOI.
5. Respondent should be willing to offer the System for field trial against RFP to be issued by MOD (India).
6. The Respondent should give their willingness to provide technical support to OFB including supply of product/production documentation, technological documents, deputation of technical specialists to OFB premises and any other support required to establish and maintain indigenous production as per specified quality standards. This shall continue till the service life of the system.
7. The Respondent must be willing to provide work share to OFB so as to meet the requirement of minimum Indigenous content in the Contract as per the requirement under stipulated categorisation of the product as per DPP-2016.
8. The Respondent has to confirm that there are no Government restrictions or limitations in the country of the Respondent or countries from which subcomponents are being procured for export of any part of the system being supplied.
9. The Respondent has to confirm that there are no infringements of any patent Rights in accordance with the laws prevailing in their country.

PART-II: TECHNICAL REQUIREMENT

The Ministry of Defence, Government of India, intends to procure approx quantity 2958x Mini Truck (generic nomenclature of equipment). The vehicle is primarily to be used as a load carrier of payload capacity 900-1200 Kg in all types of terrain. It should be 4x4 drive capable of operation in different terrain and climatic conditions prevalent in the country for use by the Indian Army. The platform should facilitate modification for other uses including small troop carriage, specialist roles viz, reconnaissance and weapons platform incl containerization capable to operate on highways and cross country.

1. Operational Parameters.

- a. The vehicle should be of modern design and employ latest technology in all systems to give best performance & reliability.
- b. The vehicle must be based on diesel engine, fuel efficient, sturdy chassis with load carrying capability of 900-1200 Kg under different terrain and climatic conditions prevalent in the country for use by the three services.
- c. Facility for easy and quick conversion to flat bed configuration by removal of side walls and tail board of vehs with locking arrangement for container transportation.
- d. The cabin must have suitable ventilation and provided with observation hatch.
- e. The tentative timeline for issue of RFP would be within six months of issue of RFI. The approximate quantity to be procured is about 2958.

2. Board Technical Requirements.

- a. Contemporary turbo charged diesel engine.
- b. Better mobility acceleration and fuel efficiency.
- c. Prevalent 'Emission Norms'.
- d. Low cost of maintenance.
- e. Life expectancy features
- f. Better drivability by incorporating features of power steering, automatic transmission and ABS depending on the employability.
- g. Shallow water fording capability.
- h. Should be able to carry five personnel incl. drive with battle loads.
- i. Provision for climate control for operation in inhospitable weather conditions.
- j. Towage facility with tow hook.
- k. Winch facility with capabilities.
- l. A cold starting device should be provided for starting the engine in extreme cold climatic conditions ranging from -15° C to 45° C.

- m. Turbocharger along with intercooler of advanced technology should be incorporated if required.
- n. The vehicle shall be fitted with right hand power drive.
- o. The tyres used shall be of the standardized range i.e. sand cum highway currently in use by the services and with maintenance free battery.
- p. The vehicle shall be capable to operate upto 14,000 feet in high altitude areas.
- q. Vehicle shall be transportable by air, rail & sea. Provision of lashing points / hooks for paradrop & camouflage net.
- r. Lubricants shall be available in India & system of warning provision for its low level indication.
- s. Vehicle shall be olive green in colour.
- t. Temp gauge, fuel gauge, RPM gauge, oil gauge, speedometer, air pressure gauge etc should be part of the main console.
- u. **Trials** - equipment will be put through a Field Evaluation Trial (FET) in India on a 'No Cost No Commitment' basis with minimum 2 vehicles by Indian Army.
 - (aa) Summer & Winter Trials.
 - (bb) Desert & High Altitude Areas Trials.
 - (cc) Maintainability Evaluation Trials.

Environment/other standards to be met as and when & what required for clearance, international standards etc.

3 Technical features

Sl.No.	Specification/Parameter
1.	<u>Payload.</u> To be capable in the pay load of 900-1200 Kg in all types of terrain.
2.	<u>Vehicle weight (Un-Laden).</u> Not more than 3500 kgs
3.	<u>Gradeability Fully Laden.</u> Not less than 30°
4.	<u>Fording.</u> Not less than 500 mm without preparation.
5.	<u>Self Recovery Winch.</u> Must be provided
6.	<u>Side slope stability</u> . Not less than 15 Degree
7.	<u>Vehicle speed at Full Load .</u> (a) <u>Max. Speed Maintainable on Metalled Roads.</u> Not less than 100 Km/h on level highways hr. (b) <u>Max.Speed on Cross Country</u> . Not less than 45 Km/hr (c) <u>Acceleration.</u> Not less than 0 to 60 Km/hr speed in 35 seconds on plain metalled road. (d) <u>Power.</u> Min 112hp@3200 rpm
8.	<u>Operating Range (Cross Country in Deserts)</u> . Not less than 200 Km (Highways-400 Km)
9.	<u>Turning circle Diameter.</u> Not more than 6 meters
10.	<u>Fuel Tank.</u> Should be self-sealing with fire suppressor material to prevent fire.

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11.	<u>Fuel System.</u> (a) KmPer Lit of veh. (b) type of fuel used,required any specified additives at extreme cold temp. (c) If there any scope of multi fuel technology being adopted .
12.	<u>Ground Clearance .</u> Not less than 250mm,fully laden.
13.	<u>Suspension.</u> Independent suspension for all four wheels.
14.	<u>Environment Control.</u> The vehicle must be provided with Heating Ventilation and Air Conditioning (HVAC)
15.	<u>Angle of approach and Departure Angle.</u> Both to be not be less than 35°
16.	<u>Torque.</u> 300 Nm @ 1400-2200 rpm or higher
17.	<u>Transmission.</u> Automatic transmission with minimum four forward and one reverse gear, neutral and parking, either all-time 4x4 or with provision to select 4x4 / 4x2 internally from the driver's cabin.
18.	<u>Steering (side and technology).</u> Right hand power assisted Steering.
19.	Emergency / parking brake / exhaust brakes be provided. a. The paring brake shall be able to hold the vehicle on max gradient.
20.	<u>Tyres</u> - The following types of tyres to be provided. a. <u>Sand Tyres</u> – Sand tyres suitable for off road, cross-country movement in deserts. b. <u>Highway Cum Off-Road Tyres</u> – Suitable tyres for movement on tarmac roads and cross-country over plain muddy terrain.
21.	<u>Electrical System -</u> Battery Type & Volt.
22.	<u>Suspension</u> a. Type of system. b. Type of shock absorbers.
23.	<u>Bridge classification</u> – to be provided
24.	<u>Seating Capacity (Upto 5 persons incl drv)</u> – Layout of seating arrangements?
25.	<u>Power to weight Ratio</u> – Not less than 25 Kw/ton (Fully laden with AC on).
26.	<u>Configuration and engine.</u> a. Type and power of Engine. b. Average life of engine. c. Power to weight ratio. d. Cold staring device fitted. e. Capable of operating in deserts, marshy & high altitude areas. f. Turbocharger along with intercooler incorporated. g. No of cylinders & arrangements. h. What technology being adopted, to ensure future pollution norms. i. Turbocharged Diesel engine, with a life of minimum 100000 km.
27.	<u>Starting System</u> –If the vehicle have alternate starting system.
28.	<u>Gear Box Axles</u> – a. Type of gear box. b. Auxiliary gear box with selectable front drive i.e. 4x2/4x4 options with additional reduction to obtain selectable high or low gear ratio available. c. Differential lock available.
29.	<u>Emlssion Norms.</u> – Type of CPCB/CMVR norms prevalent at time of delivery.
30.	<u>Lighting arrangements</u> – Will fog lamps, convoy lamps, engine compartment lamp, cabin lamp, map reading lamp, blackout lamps, crew cabin lamp would be provided
31.	<u>Additional Fitments</u> – Tow hooks, fire extinguisher, spare fuel jerrycan holders mobile charging systems, radio set/VHF, spare wheel prövision, took kit, tool box, cabin HVAC (AC), mirrors non-skid chains etc be provided.
32.	<u>Display Panel</u> - Digital

PART-III: COMPLIANCE STATEMENT

The technical requirement of the System as mentioned in Part-II above to be converted into a tabular format given below so as to ensure that no parameter is left out by OEM (Please refer Part-II.).OEM is required to comply for each parameter.

Parameter	Compliance(Yes/No)	Remarks

PART -IV: ADDITIONAL INFORMATION

- Are you the OEM of the System? If yes, is your company the designer of the System or the same is being manufactured in collaboration?
- Are you making the complete equipment or it is being integrated by you?
- In case System is offered through collaborator, whether your collaborator agrees for transfer of technology?

Part-V: COMPANY PROFILE

1. Name of the Vendor/Company/Firm :-

(Company profile, in brief, to be attached)

2. Type (tick the relevant category)

- a. Original Equipment Manufacture (OEM) :
- b. Government sponsored Export Agency :
(Details of Registration be provided)
- c. Authorized Vendor of Foreign Firm
- d. Other (Give specific details)

3. Contact Details

Postal address, Fax, e mail, website, details of contact person etc:

4. Local Branch/Liaison Office in India (If any)

Name and address

5. Financial details

- a. Annual turnover for last three financial years
- b. Profit before tax (for last three financial years)
- c. Profit after tax (for last three financial years)
- d. Equity
- e. Debt / equity ratio

6. Earlier contract with Indian Ministry of Defence / Govt. agencies

S. No.	Agency	Contact No.	Equipment	quantity	Cost

7. Details of manufacturing Infrastructure available.

8. Certification by Quality Assurance Organization (If Applicable) :-

Agency	Certification	Applicable from (Date and Year)	Valid till (Date & Year)

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

- (a) Name of product :- (should be given category wise for all products)
- (b) Description (attached technical literature):
- (c) Status (in service/design & development stage) :
- (d) Production capacity per annum:
- (e) Countries where equipment is in service:
- (f) Whether export clearance is required from respective government
- (g) In case of equipment and ammunition JBMOU compliance to be specified.
Details of any collaboration/joint venture/co production

10. Any other relevant information :

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