

## INDIAN NAVY INVITES

### EXPRESSION OF INTEREST (EOI) FOR REPAIR AND OVERHAUL OF ONBOARD OXYGEN GENERATION SYSTEM (BKDU-130) - MIG 29K

1. Indian Navy invites Expression of Interest (EOI) “for repair and overhaul of Onboard Oxygen Generation System (BKDU-130)” from reputed Indian firms based in India having technical and financial capability, infrastructure and experience to execute the project.

2. **Introduction to OBOGS.** On-Board Oxygen Generation System of MiG 29K/ KuB aircraft is a life support system which produces breathing gas mixture (for the pilots) from compressed air bled by the aircraft air conditioning system. The system utilises Zeolite mixture for generation of oxygen rich breathing gas. The content of oxygen corresponds to aviation regulatory requirements during flight in pressurised cockpit at altitudes up to the service ceiling of the aircraft.

#### **Details of Work**

3. **Scope of Work.** The scope of work involves establishment of comprehensive test, repair and overhaul facilities for On-Board Oxygen Generation System. This should also include facility for disassembly of the unit modules into their respective sub modules/ sub components and carrying out depot level (repair) activities required for repair and overhaul of BKDU-130. The broad scope include following:-

(a) Establishment of repair and overhaul facility of BKDU-130 unit at NAY(Goa) premises under Government Owned Company Operated (GOCO) model.

(b) Provision of manpower, infrastructure, test rigs, TTGE (Tools, Test and Ground equipment) as applicable for setup in NAY(Goa) premises.

(c) Transfer of Technology (TOT) from OEM, provisioning of technical publications/ documents and sourcing of spares & consumables.

(d) Conduct of training including certification of personnel, provisioning of required TTGE (Tools, Test and Ground equipment) and support equipment for undertaking the repairs/ overhaul.

4. **Stages and Responsibility.** The stage wise tasks and responsibility for the program is as tabulated below: -

S/N	Task	Navy (IHQ/ DAPP/ NAY(Goa)	R&D Partner (Through Industry)	Industry Partner	Remarks
		Responsibility			
(a)	Project Definition	✓			
(b)	EOI, Price discovery, Vendor Mgmt. RFP. SO	✓			Including Vendor Meets
(c)	Finalisation of Facilities Layout	✓		✓	Submission of Facilities Data Pack within existing Infrastructure in consultation with Industry
(d)	Certification Roadmap			✓	In consultation with CEMILAC/ RCMA
(e)	Establishment of ToT with OEM			✓	Scope to be vetted/ cleared by NAY(Goa)
(f)	Process & Test facilities		✓	✓	With Academic & R&D Partners as necessary Overseen by NAY(Goa)
(g)	Reviews	✓			Collegiate PDR, DR, TRR, PRR, Closure
(h)	Establishment of ROH facilities		✓	✓	Overseen by NAY(Goa)
(j)	Submission of Regulatory Documentation		✓	✓	ROH Process, indigenous spares and consumables
(k)	Regulatory Clearance for Implementation	✓			Collegiate Post Each Review
(l)	Production Manpower Resourcing		✓	✓	Identification of training needs, Training & Deployment including certification
(m)	QA Manpower Resourcing	✓		✓	Identification of training needs, Training & Deployment
(n)	Spares and Consumable resourcing			✓	For repair / overhaul as per tasking intimated by NAY(Goa)
(p)	Production Process Planning and Control	✓		✓	Spearheaded by NAY(Goa)
(q)	Annual Financial Management	✓			Based on production tasking and output

5. **Place, time and Date of Pre-bid Meeting.** The pre-bid meeting will be in the form of joint evaluation/clarification of proposals submitted by industrial partners with participation of industrial bodies. These meeting will shortlist the eligible proposals which will determine the scope of the Limited Tender Enquiry. The meeting would be held at NAY(Goa) on 31 May 23. The response to the subject EoI can be uploaded online on Defence Procurement Portal or can be dispatched through courier or speed post to reach the following address before 1700 hrs on 25 May 23: -

The Commodore Superintendent,  
Naval Aircraft Yard(Goa),  
Dabolim Airport Road,  
Vasco, Goa 403801.

### **Eligibility Criteria**

6. Only Indigenous firms based in India and possessing experience in professional deployment of technical manpower in projects undertaking Design, development, repair, overhaul, reclamation & certification of electronic/ mechanical/ electromechanical/ airframe/ aero engine aggregates, avionics (as applicable) used in aircraft whose proposals have been shortlisted by the proposal review committee consisting of both **IN** and industrial reps would be eligible.

7. The following documents/ evidence are expected to be submitted by interested firms willing to partner with **IN** in their endeavor for '**Self Reliance in Maintenance**':-

(a) **Financial Capacity.** Details of the financial capability of the interested firms in the form of Balance Sheet and ITR of last three/ five financial years including average turnover, certified by a CA.

(b) **Certification.** Details of ISO 9001/ AS 9100/ DGAQA/ Design & Development Agency certification by appropriate agency.

(c) **Registration.** Details of registration status of the firm as per Companies Act including MSME/ NSIC certification, if any.

(d) **Work Experience.** Following will be considered for evaluation of work experience by the firm:-

(i) Experience of working with Russian firms through MoU/ JV/ ToT

(ii) Experience of working with ADA on LCA/ TEDBF on similar systems/ components

(iii) Experience in successful deployment of human resource in undertaking indigenous development/ part tasking/ ROH/ MOH/ Repair Reclamation tasks with Defence, Govt, PSUs or any other agencies

(iv) Details of current/ similar projects in hand, their valuation and completion dates.

(e) **Technical Capability**. The firm responding to EoI should have the following pre-qualification and must submit documents to support their eligibility.

(i) Must possess experience in proven human and machine/ equipment resources deployment and knowledge about aeronautical design, development, repair, overhaul, reclamation & certification of electronic/ mechanical/ electro mechanical/ airframe/ aero engine aggregates, avionics (as applicable).

(ii) Familiarity with RCMA/ CEMILAC certification procedures and preferably experience in certification of products and services.

(iii) Familiarity with the supply chains for aeronautical quality components and materials, special tools and machinery.

(iv) Manufacturing and fabrication facility/ outsourcing (indicate plan and extent of outsourcing) as applicable to the project.

(v) In-house test facilities / outsourcing (indicate plan and extent of outsourcing) as applicable to the project.

8. The following, specifically while deploying technical manpower, are to be noted:

(a) The mentioned activities shall be carried out at **IN** premises, by the industrial partner.

(b) Personnel deployed must have basic knowledge of handling chemicals/ life support equipment and accessories and should be aware of safety precautions/ instructions as applicable.

(c) Health and safety of industrial partner's personnel deployed on any activity would be the responsibility of the industrial partner. Requisite Personnel Protective Equipment (to be provisioned by the industry partner) are to be worn by the personnel working.

(d) The industrial partner needs to indemnify NAY(Goa) / **IN** against any injuries to personnel due to accidents/ incidents caused by human error on the part of the personnel employed for the work by the partner.

9. **Detailed Project Report (DPR)**. The DPR will be submitted by all industrial partners in response to EOI along with EOI

(a) Outline features of the proposal.

(b) Estimated Capital expenditure.

(c) Roles, responsibilities and expertise details of consortium members, if any.

(d) Role of foreign technology provider, if any.

- (e) Recommended stages/ phases of task with priorities & time schedules.
- (f) Requirement of specialized training and testing assistance where facilities are available only with government entities, DPSUs and DRDO/ DGQA/ DGAQA.
- (g) Cost- sharing aspects as applicable.

10. EoI response would be evaluated based on the supporting documents and physical verification of company's capability to execute the project.

11. Clarifications may be sought from NAY(Goa), to address of which is shown below:

The Commodore Superintendent,  
Naval Aircraft Yard(Goa),  
Dabolim Airport Road,  
Vasco, Goa 403801.  
Ph: 0832-2585703

12. The interested firm have to forward the following details to attend the pre- bid meeting: -

- (a) Letter from firm for attending the pre-bid meeting.
- (b) ID proof of representatives/ AADHAR details.
- (c) Residence address along with nearest police station.