

**GENERAL SPECIFICATION FOR OVERHAULING OF 01 X MI-171 SERIES HELICOPTER INCLUDING
2X ENGINEf TB3-117BM), 1XMAIN GEAR BOX (BP-14) AND 1XAUXILIARY POWER UNIT (AI-9B-1)
AND OTHERS ASSOCIATED AGGREGATES OF BANGLADESH ARMY**

Ser no	Repuirements	To be filled up by the bidder										
01	Name of the Bidder with full address	To be mentioned										
02	Name of the Principal with full address	To be mentioned										
03	Name of the authorized Plant/ MRO (Maintenance Repair and Overhaul) with full address from where the helicopter will be overhauled	To be mentioned										
04	The bidder must be the manufacturer or designer of MI-171 series helicopter or their authorized MRO (Maintenance Repair and Overhaul) by the manufacturer (enlisted in Armed Forces Division, Prime Minister's Office, Government of the People's Republic of Bangladesh to overhaul MI-171 series Helicopter). Necessary certificates are to be attached and without authorization certificate, offer/quotation will not be considered.	To be complied										
05	Authorized MRO may carryout overhauling of the helicopter at Bangladesh Army (BA) facilities (on-site) or MRO's facility (off-site) as per standard overhauling procedure mentioned in latest overhaul manual of Mi-171 series helicopter. All necessary entry to be made and signed by themselves. Technical details of the helicopter are appended below: <table><tr><td>Helicopter Serial Number</td><td>Date of Manufacture/ Acceptance</td><td>Total Service Life</td><td>Time Before 1st Overhaul Hours/ Years</td><td>Time Since New (TSN) Hours /Years</td></tr><tr><td>171S0005 0157550U</td><td>06 July 2016</td><td>35 years</td><td>2000/9</td><td>1509:32/9</td></tr></table>	Helicopter Serial Number	Date of Manufacture/ Acceptance	Total Service Life	Time Before 1 st Overhaul Hours/ Years	Time Since New (TSN) Hours /Years	171S0005 0157550U	06 July 2016	35 years	2000/9	1509:32/9	Separate price quotation to be mentioned if applicable.
Helicopter Serial Number	Date of Manufacture/ Acceptance	Total Service Life	Time Before 1 st Overhaul Hours/ Years	Time Since New (TSN) Hours /Years								
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06	<u>Overhauling of Helicopter and Other Life Components.</u> <p>a. Time Between Overhaul (TBO) of the helicopter itself and all installed components/aggregates and accessories should be as per the existing bulletin/certificates of the respective components/ aggregates. TBO should be counted from the date of signing of the acceptance certificate in Bangladesh by both the bidder's specialist and BA representative after successful completion of overhauling job.</p> <p>b. All the life components of the helicopter due for overhaul within 2000 hrs/ 12 years, are to be overhauled. Armament components need not to be overhauled.</p> <p>c. Life components are to be overhauled from the authorized overhauling factory and necessary entry is to be made in relevant certificate/ log book.</p> <p>d. All the mandatory replaceable items are to be replaced with new one.</p> <p>e. All the rubberized hoses/pipes, tyres with tubes, chains & links, insulations for electrical wiring etc are to be replaced with new items.</p>	To be complied										



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07	<p>The bidder has to comply the followings during overhaul:</p> <p>a. <u>Tail Rotor.</u> New Tail Rotor Blades are to be provided during the overhauling of the tail rotor hub in matched condition.</p> <p>b. <u>Fuel Suspension Tank.</u> Self-sealing provision of suspension fuel tank of the helicopter is to be replaced.</p> <p>c. <u>Inspection/ repair of on conditional components.</u> All other conditional items having sufficient service life are to be removed and inspected. Items found unserviceable are to be repaired/replaced.</p> <p>d. <u>Other Items.</u> All other items not mentioned above, if found unserviceable during overhaul, are to be repaired/replaced.</p> <p>e. <u>Condition of the Replacement Items.</u> All replaced items must be brand new and date of their production must not before one year from the date of signing contract. All the replaced item must have Original Equipment Manufacturer (OEM) certificates with them. The overhaul of the helicopters with all installed components/ aggregates and accessories including 2x Engine (TB3-117BM), 1x Auxiliary Power Unit (AU--9B-1) and 1x MGB (BP-14) are to be carried out from authorized factory/plant/MRO. Name of the overhauling factory of aforementioned major components should be mentioned.</p>	To be complied																				
08	<p>Technical details of the major components (Engine, MGB, APU) are appended below:</p> <table><tr><th>Serial Number of Major Components</th><th>Date of Manufacture/ Acceptance</th><th>Total Service Life</th><th>Time Before 1st Overhaul Hours/ Years</th><th>Time Since New (TSN) Hours /Years</th></tr><tr><td>22578825021 55, 22578825021 56 (Engine)</td><td>21 Sep 2015</td><td>6000 hrs</td><td>2000/10</td><td>1509:49/09 1509:46/09</td></tr><tr><td>10401445236 44 (MGB)</td><td>29 Mar 2016</td><td>8000. hre</td><td>2000/10</td><td>1509:49/09</td></tr><tr><td>22509325002 25 (APU)</td><td>08 July 2015</td><td>900 Hrs</td><td>300/10</td><td>139:46/9</td></tr></table>	Serial Number of Major Components	Date of Manufacture/ Acceptance	Total Service Life	Time Before 1 st Overhaul Hours/ Years	Time Since New (TSN) Hours /Years	22578825021 55, 22578825021 56 (Engine)	21 Sep 2015	6000 hrs	2000/10	1509:49/09 1509:46/09	10401445236 44 (MGB)	29 Mar 2016	8000. hre	2000/10	1509:49/09	22509325002 25 (APU)	08 July 2015	900 Hrs	300/10	139:46/9	To be complied
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09	All avionics equipment and their harnesses in the helicopter are to be checked in the test bench as well as in the helicopter. Unserviceable or defective items/wirings are to be repaired/ replaced to ensure that all avionics equipment are serviceable and functional after overhaul. Necessary entry to be made in log books/ passport in English.	To be complied																				
10	Paint of the helicopter is to be removed by paint strip method and Helicopter is to be painted after overhaul as per the painting scheme provided by BA.	To be complied																				
11	<p><u>Warranty:</u></p> <p>a. Standard warranty to be mentioned.</p> <p>b. Any discrepancy/malfunction of component/aggregate/accessory (overhauled & replaced) found within the. Warranty period shall be rectified/replaced at bidder's expenses including both way freight and insurance charges within the shortest possible time but not later than 60 days from the date of reporting such defects. However, if the helicopter grounded period is more than 60 days, than the full period of grounded time of the helicopter will be added with total warranty period.</p>	To be mentioned/ complied																				
12	Any mandatory and other bulletins/modifications that are applicable for the																					



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	helicopter are already due/will be due within warranty period after overhauling of the helicopter must be carried out. Compliance of all bulletins/modifications is to be recorded in the logbook/ passport in English	To be complied																
13	<p><u>Shipment (Applicable for overhauling in MRP's facility only).</u></p> <p>a. The bidder is to ensure the shipment of contracted helicopter to the overhauling factory within 60 calendar days from the date of signing the contract.</p> <p>b. Turn around time of overhaul of the helicopters to be mentioned .This duration will be counted from the date of shipment of the helicopter from Bangladesh to the date of arrival of the helicopter to Bangladesh after overhauling.</p> <p>c. The bidder is to send a team of required number of specialists for disassembly and crating of the helicopter. The bidder is to provide particulars of the specialist's team to BA minimum 03 weeks before the date of arrival of the team for necessary security clearance at this end.</p> <p>d. All expenditure for disassembly, crating, carrying the Crates/Container, transportation of the helicopter and all aggregates/ accessories (including Engines, APU & MGBs etc) by sea/air from Bangladesh (Chattogram/Dhaka) to overhauling factory and from overhauling factory to Bangladesh (Chattogram/Dhaka) after overhaul will be borne by the bidder. Expenditure related to food and accommodation for the specialist team will be born by the bidder. BA will provide necessary administrative/ official support and internal transportation only for the specialist.</p> <p>e. All disassembled items must be packed and shipped in standard airworthy/seaworthy packing after necessary repair/ overhaul.</p> <p>f. The bidder will be responsible for safe transportation, maintenance and serviceability of all the items during the overhaul of the helicopter at their facility.</p> <p>g. Once the helicopter is received back in Bangladesh after overhaul, the bidder is to send a team of specialists including pilots, flight engineer, technician and one interpreter (if necessary) to Bangladesh for assembly and test flight of the helicopter. The bidder is to provide particulars of the specialist's team to BA minimum 06 weeks before the date of arrival of the team for necessary security clearance at this end. All the cost/expenditures including food and accommodation of the bidder's specialist team is to be borne by the bidder. BA will provide fuel, oil & hydraulic for the test flight.</p> <p>h. After assembly of the helicopter in Bangladesh, required number of test flight covering all necessary flight regimes till the serviceability of the helicopter will be carried out by the bidder's pilots and flight engineer as per the flight manual. Once helicopter is found serviceable, joint test flight will be carried out by bidder's pilots and BA pilots for acceptance.</p>	To be complied																
14	<p><u>Quality Assurance Check During Overhauling by BA Engineer & Technicians for off-site overhauling Stage inspection (SI).</u></p> <p>a. During overhauling BA team will check the overhauling process as fol:</p> <table><tr><th>Ser no</th><th>items</th><th>No of members</th><th>Duration</th></tr><tr><td>1.</td><td>Helicopters and its aggregates</td><td>2</td><td>To be mentioned</td></tr><tr><td>2.</td><td>Engine & APU</td><td>1</td><td>To be mentioned</td></tr><tr><td>3.</td><td>MGB</td><td>1</td><td>To be mentioned</td></tr></table> <p>b. The bidder will also ensure that BA team is allowed to check logbooks, certificates, replaced components and any of associated documents/items during their stay at the overhauling facility.</p> <p>c. All the cost including air fare, accommodation, transportation, fooding, medical (if needed), etc will be borne by the bidder.</p>	Ser no	items	No of members	Duration	1.	Helicopters and its aggregates	2	To be mentioned	2.	Engine & APU	1	To be mentioned	3.	MGB	1	To be mentioned	Expenditure and duration to be mentioned
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1.	Helicopters and its aggregates	2	To be mentioned															
2.	Engine & APU	1	To be mentioned															
3.	MGB	1	To be mentioned															



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	<p><u>Pre Shipment Inspection (PSI).</u></p> <p>a. After completion of overhauling job pre shipment inspection will be carried out by the cep)of Bangladesh Army(BA) consisting of 2x Aviation Engineer, 1 xFlight Engineer,2x Pilot and 1x representative from Inspectorate for seven working days. Joint test flight will be conducted in presence of BA Avn pilot and by the test pilot of overhauling plant in the overhauling country. Joint test flight certificates will be signed by both party. The authorized representative or the chief inspector of the overhauling factory will inspect the helicopter and will certify the completion of the job both in overhauling country and Bangladesh (upon arrival in Bangladesh). The bidder will also ensure that BA team is allowed to check logbooks, certificates, replaced components and any of associated documents/items.</p> <p>b. The bidder is to intimate the overhaul schedule and plan of visit of BA team at least 12 (twelve) weeks before the schedule date of arrival in the factory for stage inspection and pre shipment inspection.</p> <p>c. The bidder will provide internal transportation for PSI team. Arrangement for entry in the overhauling country to be made by the bidder. All other cost will be borne by BA.</p>	To be complied
15	The bidder may carry out pre-tender inspection of the helicopter at Army Aviation site at their own expenses before submitting the offer/quotation.	To be mentioned
16	The bidder is to offer/quote overhaul cost and freight charge with time line (both ways) by sea/air separately.	To be mentioned

