

FOR OFFICIAL USE ONLY

Directorate General Defence Purchase
Ministry of Defence
New Airport Road
Tejgaon, Dhaka-1215
Telephone: Military- 5036
Civil - 9132225
E-mail: adp7army1@gmail.com
Fax: 88-02-48111455

০৬ Ashwin 1428

৭৭ September 2021

06.06.0000.221.aval.21

PROCUREMENT OF ATTACK HELICOPTER WITH ARMAMENTS

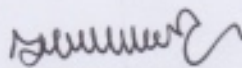
Reference:

A. Army Headquarters, General Staff Branch (Army Aviation Directorate) letter number 23.01.901.064.04.099.01.16.09.21 dated 16 September 2021 (Not to all).

1. It is to inform you that Bangladesh Army is planning to procure **Attack Helicopter with Armaments** for Financial Year 2021-2022. Therefore, interested firms are requested to provide necessary offers, brochures/catalogues, manuals, budgetary price etcetera (each in duplicate). The document has to be sent directly **The President Board of Officer- evaluation of Attack Helicopter for Bangladesh Army, C/O: Army Aviation Group by 26 September 2021** with an intimation to this Directorate General please. A draft format of the general technical specification is attached to this letter. Lack of any information will disqualify the offer. Please note that, provide enlistment certificate of DGDP along with the technical offer.

2. **For Board of Officer, C/O: Army Aviation Group Only:** Price can be disclosed during the tender process only

3. Your co-operation will be highly appreciated.


SWARNA AHMED
Major
For Director General

Encloser:

1. General technical specification of Attack Helicopter with Armaments- 13 (Thirteen) page Only.

Distribution:

External:

Action:

(All Concerned Firm/Supplier)

Information:

Army Headquarters, General Staff Branch (Weapon, Equipment and Statistics Directorate)
Army Headquarters, General Staff Branch (Army Aviation Directorate)
Army Headquarters, General Staff Branch (Overseas Operation Directorate)
Army Headquarters, Engineer in Chief's Branch (Engineer Directorate)
Army Headquarters, Master General of Ordnance Branch (Ordnance Directorate)
Army Headquarter, Master General of Ordnance Branch, Electrical and Mechanical Engineering Directorate
Army Headquarters, Master General of Ordnance Branch, Inspection and Technical Development Directorate
Inspectorate of Vehicle & Engineering Equipment (IV&EE), Dhaka Cantonment
Army Aviation Group

Internal:

Action:

IT Section - (For flashing on DGDP web site).

Notice Board

FOR OFFICIAL USE ONLY

GENERAL TECH SPEC OF ATTACK HELICOPTER

Serial	Description	Tech Spec	Rem
PART-1: GENERAL SPECIFICATION			
1.	Nomenclature	Attack Helicopter (Multi-engine)	
2.	Brand	To be mentioned	
3.	Model	To be mentioned	
4.	Country of Origin	Group A and group B	
5.	Country of Manufacture	Group A and group B	
6.	Country of Assembly	Group A and group B	
7.	Year of Manufacture	Not earlier than the year of contract	
8.	Name of Manufacturer with Complete Address (Office address, Telephone, Fax Email and Web address)	Details to be mentioned	
9.	Name of Principal with Complete Address (Office address, Telephone, Fax Email and Web address)	Details to be mentioned	
10.	Name of Local Agent with Complete Address (Office address, Telephone, Fax Email and web address)	Details to be mentioned	
11.	General Specifications, Functions and Capabilities	<p><u>General Specifications</u></p> <p>The helicopters would be multi-mission capable, versatile in operation, carries lethal weapons system with precision engagement capability against both air and ground targets and quick maneuvering capability.</p> <p><u>Functions</u></p> <p>a. To be able to conduct armed reconnaissance in all-weather condition.</p> <p>b. Capable of conducting aerial attack.</p> <p>c. To be able to carry out precision strike on point target.</p> <p>d. Capable of conducting armed escort.</p> <p>e. To be able to provide fire support to ground troops.</p> <p>f. To be able to suppress enemy air defense.</p>	



RESTRICTED

Serial	Description	Tech Spec	Rem
		<p>g. Capable of conducting deep strike behind enemy line.</p> <p>Capabilities</p> <p>a. Should be capable of engaging air to ground targets such as enemy infantry, tank and armored vehical.</p> <p>b. Should be capable of engaging air to air targets like UAVs and aircrafts.</p> <p>c. Should be capable of operating day and night in all weather conditions.</p> <p>d. The weapon system to include autocannons, machine guns, rockets and guided anti-tank missiles to be able to engage variation of ground and aerial target.</p> <p>e. The helicopter should have aircraft survivability equipment and to be able to withstand hits from small arms fire in critical areas.</p> <p>f. It should have both active and passive counter measures systems, missile warring systems, laser warring systems, radio frequency jammers, radar warring receiver and infrared counter measures.</p>	
PART-2: TECHNICAL SPECIFICATION			
12.	General Description	<p>a. Must have all weather day and night Visual Flight Rules (VFR) & Instrument Flight Rules (IFR) operation, navigation and target acquisition and engagement capabilities.</p> <p>b. Must have inherent survivability capacity.</p>	
13.	Crew Capacity	Minimum 02 (Two), with tandem arrangement.	
14.	Cockpit	<p>a. Fully integrated glass cockpit must accommodate sensors, weapons, and display systems and secondary flight displays in both crew stations.</p> <p>b. Provision for supplemental oxygen system for use at high altitudes (To be mentioned-optional).</p>	Ser b To be mentioned (optional)
15.	Payload (Useful load – fuel)	Minimum 600kg	
16.	Operating Temperature	Minimum- 5°C to maximum 44°C or above	
17.	Control System	<p>a. Fully functional dual control.</p> <p>b. Pilot and copilot cockpits must</p>	

RESTRICTED

Serial	Description	Tech Spec	Rem
		allow either crew member to fly the helicopter as well as operate avionics systems and preferably control the use of all weapons.	
18.	Environment Control System	Provide clean air circulation in the cockpit with temperature control	
19.	Endurance /Range	Minimum 2 hours (MCP)/ Minimum 300km (With maximum Gross Weight, International Standard Atmosphere, standard fuel and no reserve at sea level).	
20.	Cruise speed	Minimum 200kph	
21.	Maximum Speed	Minimum 270 kph	
22.	Maximum rate of Climb	Minimum 9m/sec	
23.	G limit	To be mentioned	
24.	Service Ceiling	Minimum 14500ft	
25.	OGE Hover Ceiling	To be mentioned	
26.	Wind Limitations for Taxi, Take-Off, Landing	To be mentioned	
27.	Combat Radius	Minimum 170km	
28.	Range with Standard Fuel	To be mentioned	
29.	Range with Additional Fuel Tanks	To be mentioned	
30.	Fuel Consumption (Rate per hour)	To be mentioned	
31.	Overall Dimension of the Helicopter	To be mentioned	
32.	Airframe, Fuselage		
	a. Country of Origin	Group A and B Countries	
	b. Country of Manufacture		
	c. Country of Assembly		
	d. Airframe Operations Life (hours and calendar year)	To be mentioned, in terms of hours and years	
	e. Airframe Composition, Life and Time Before Overhaul (TBO). (hours and years)	To be mentioned, in terms of hours and years	
33.	Engine		
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/ Model/ Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>Group A and B Countries</u>	
	d. Country of Manufacture		
	e. Country of Assembly		
	f. Year of Manufacture	<u>Not before the contracted year</u>	
	g. Engine Type	a. Must have twin turbine engine with dual FADEC (Full Authority Digital Engine Control) or similar system. b. Must be installed with or have provision for Sand Filter/ Inlet Barrier Filter/ Particle Separator.	
	h. No of engine	To be mentioned	
	j. Details of another engine	To be mentioned	
	k. Minimum Engine Ratings (100% RPM)	a. Engine Power Rating (For Take-off) minimum 1,300 SHP. b. Engine Power Rating Continuous (MCP) minimum 1,200 SHP.	

RESTRICTED

Serial	Description	Tech Spec	Rem
		c. One Engine Inoperative (OEI) minimum 1,600 SHP.	
	l. Single Engine Performance	Must be able to continue flight and land safely if one engine fails.	
	m. Engine Operations Life	To be mentioned in terms of hours and years.	
	n. Time Before Overhaul (TBO). (hours and years)	To be mentioned. Preferably on condition.	
	p. Interchangeability of Engines	Preferably interchangeable. To be mentioned.	
	q. Engine test bench certificate	During inspection Engine Test Bench Report (for each model) which was prepared by manufacturer during production of engine at manufacturing factory must be produced and submitted to the PSI team for each model (duly signed and stamped by the manufacturer). Other engines (mentioning engine number) of the same model must be certified confirming the engine Test Bench Report by the manufacturer (duly signed and stamped).	
34.	<u>Rotor Drive System</u>	(1) Main Rotor: 4-5 blades. (2) Tail Rotor: Minimum 02 blades. (3) Ballistic tolerant composite blades. (4) During autorotation transmission must be able to provide power electrical and hydraulic system.	
	a. Country of Origin	Group A and B Countries	
	b. Country of Manufacture		
	c. Country of Assembly		
35.	<u>Hydraulic System</u>	(1) Must have two separate and independent hydraulic power system. (2) Each hydraulic power system has to be driven by an integral hydraulic power supply. (3) The complete loss of one hydraulic system should have no degradation in helicopter handling.	
	a. Country of Origin	Group A and B Countries	
	b. Country of Manufacture		
	c. Country of Assembly		
36.	<u>Fuel</u>	Jet A fuel.	
	a. Fuel Type	(1) Self-sealing and crashworthy.	
	b. Fuel Tank	(2) Separate internal tank and provision for auxiliary tank.	
	c. Fuel Pump	Redundancy of booster pumps in internal fuel tanks to feed the engine driven pumps.	

RESTRICTED

Serial	Description	Tech Spec	Rem
	<u>Landing Gear</u>	Non-retractable landing gear (wheel/skid type).	
	a. Country of Origin	Group A and B Countries	
	b. Country of Manufacture		
	c. Country of Assembly		
38.	<u>Communication</u>	(1) Minimum two multi brand VHF AM (118-136 MHZ)/ VHF FM Low Band (140-159 MHZ) radios enabling pilots and gunners to monitor and transmit through both radios simultaneously. (2) Radio relay function. (3) Push to talk facility available on both cyclic and foot switch.	
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/ Model/ Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>Group A and B</u>	
	d. Country of Manufacture	<u>Countries</u>	
	e. Country of Assembly		
	f. Year of Manufacture	<u>Not before the contracted year</u>	
	g. Communication Range (Vertical and Horizontal)	<u>Should provide long range communication (range to be mentioned)</u>	
	h. Security Feature	<u>Must mention the method like frequency hopping /scrambling/ encryption etc.</u>	
39.	<u>Avionics and Navigation System</u>	Must mention serial (a) to (f) for all items	
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/ Model/ Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>To be mentioned</u>	
	d. Country of Manufacture	<u>To be mentioned</u>	
	e. Country of Assembly	<u>To be mentioned</u>	
	f. Year of Manufacture	<u>Not before the contracted year</u>	
	g. Dual navigation system.	<u>To be mentioned</u>	
	h. Air data computer.	<u>To be mentioned</u>	
	j. Digital moving map.	<u>To be mentioned</u>	
	k. Transponder 3/ A and C Mode	<u>To be mentioned</u>	

RESTRICTED

Serial	Description	Tech Spec	Rem
	l. IFF	IFF transponder with various operational modes (must be compatible with existing IFF sys of BD army/BAF)	
	m. Aircraft Health Monitoring System	Provide data acquisition and status monitoring for engine, transmission, hydraulic system, electrical system, fuel system, environment system and miscellaneous systems.	
	n. Emergency Locator Transmitter	In case of emergency search and rescue, capable of transmitting 121.5 MHZ, 243 and 406 MHZ.	
	p. VOR	<u>To be mentioned(</u> <u>Optional)</u>	
	q. NDB		
	r. ILS		
	s. DME		
	t. Other system	<u>To be mentioned</u>	
40.	<u>Electrical System</u>	Must mention serial (a) to (f) for all items	
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/Model/Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>Group A and B</u> <u>Countries</u>	
	d. Country of Manufacture		
	e. Country of Assembly		
	f. Year of Manufacture	<u>Not before the</u> <u>contracted year</u>	
	g. Battery	Provide sufficient power to start the engines in cold temperature. Provide emergency power for minimum 10 min	
	h. Generator/ Alternator	Dual system must be available and each system must be capable in providing full load for all electrical system in case of failure of one system	
	j. External Power Supply	Provision for external AC/DC power receptacle to get power supply on ground	
41.	<u>Air Conditioner (AC)</u>		
	a. Brand, Capacity	To be mentioned	
	b. Country of Origin	Group A and B Countries	
	c. Country of Manufacture		
	d. Country of Assembly		
42.	<u>Lighting System</u>	Must have Night Vision Goggles (NVG) compatible internal and external light	
	a. Anti-collision light	With NVG mode	
	b. Position light	With NVG mode	
	c. Search light	Steerable with NVG mode	
	d. Country of Origin	Group A and B Countries	
	e. Country of Manufacture		

RESTRICTED

Serial	Description	Tech Spec	Rem
43.	<u>f. Country of Assembly</u> <u>Safety Assurance Equipment</u>	Must mention serial (a) to (f) for all items	
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/Model/Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>To be mentioned</u>	
	d. Country of Manufacture	<u>To be mentioned</u>	
	e. Country of Assembly	<u>To be mentioned</u>	
	f. Year of Manufacture	<u>Not before the</u> <u>contracted year</u>	
	g. Auto Pilot	Four axis dual redundancy auto pilot system	
	h. Radio/Radar Altimeter	Provide exact height at low altitude	
	j. Flight Data Monitoring (Digital FDR & CVR)	Monitor flight details	
44.	<u>Survivability Features</u>		
	a. Crashworthiness	(1) Energy absorbing landing gear. (2) Self-sealing and fire protected fuel tanks. (3) Crashworthy crew seat and energy absorbers.	
	b. Ballistic Tolerance	(1) Ballistic tolerant blades and shafts. (2) Protected flight controls against bullets and fragments. (3) Transmission dry run capability. (4) Protected alternative path for tail rotor control. (5) Armored seat and side panel protection. (6) Self-sealing and fire protected fuel tanks. (7) Protection for other vital parts as required.	
45.	<u>Electronic Countermeasure Technology</u>	Must mention serial (a) to (f) for all items	
	a. Nomenclature	<u>To be mentioned</u>	
	b. Make/Model/Type	<u>To be mentioned</u>	
	c. Country of Origin	<u>Group A and B</u> <u>Countries</u>	
	d. Country of Manufacture		
	e. Country of Assembly		
	f. Year of Manufacture	<u>Not before the</u> <u>contracted year</u>	
	g. Countermeasure Dispensing System	(1) May have Chaff and flares on both	



RESTRICTED

Serial	Description	Tech Spec	Rem
	(CMDS) : Chaff & Flare	side of the helicopter to seduce any threat. (2) Decoy must be capable of automatic deployment or manually by pilot/ gunner.	
	h. Missile Warning System	(1) Automated threat detection from all direction. (2) Identify multiple threat, prioritize most critical threat, provide visual and aural warning to the pilots and advice counter measure process.	
	j. Laser Warning Receiver	(1) Automated threat detection from all direction. (2) Identify multiple threat, prioritize most critical threat, provide visual and aural warning to the pilots and advice counter measure process.	
	k. Radar Warning Receiver	(1) Automated threat detection from all direction. (2) Identify multiple threat, prioritize most critical threat, provide visual and aural warning to the pilots and advice counter measure process.	
	l. Infrared Countermeasures	Infrared suspension system	
	m. Anti-Jamming Capable Communication Means	To be provided	
46.	Armament		
	a. Minimum 20 mm Turret Gun System of Attack Helicopter.		
	(1) General Data		
	(a) Nomenclature	<u>Minimum 20 mm turret gun system</u>	
	(b) Make/ Model/ Type	<u>To be mentioned</u>	
	(c) Country of Origin	<u>To be mentioned</u>	
	(d) Country of Manufacture	<u>To be mentioned</u>	
	(e) Country of Assembly	<u>To be mentioned</u>	
	(f) Year of Manufacture	<u>Not before the contracted year</u>	
	(2) Technical Data		
	(a) Caliber (mm)	Minimum 20 mm	
	(b) Weapon Operating System	To be mentioned	
	(c) Loading System/ feed mechanism	To be mentioned	
	(d) Numbers of Barrel Available for each Weapon System	To be mentioned	
	(e) Number of Spare Barrel	To be mentioned	
	(f) Length of Barrel (mm)	<u>To be mentioned</u>	
	(g) Life of Barrel (Rounds can be fired through each barrel)	<u>To be mentioned</u>	
	(h) No of Rifling	<u>To be mentioned</u>	

RESTRICTED

Description	Tech Spec	Rem
(j) Accuracy/ Hit Probability	<u>To be mentioned</u>	
(k) Overall Dimension (length, width and height) of the Weapon	<u>To be mentioned</u>	
(l) Maximum Ammunition Stowage (rounds) and Total Ammunition Available with Specific Location	Details to be mentioned	
(m) Ammunition Capacity of each Magazine (If applicable)	<u>To be mentioned</u>	
(n) Weight of Magazine/ Box/ Ammunition (with full loaded condition) (If applicable)	To be mentioned	
(p) Type of Gun Mount Available (If applicable)	Details to be mentioned	
(q) Maximum Rate of Fire (rounds per minute)	To be mentioned	
(r) Sustain/ Combat Rate of Fire (rounds per minute)	To be mentioned	
(s) Minimum and Maximum Effective Range Against Aerial Target (m)	To be mentioned	
(t) Minimum and Maximum Effective Range Against on Ground Target (m)	To be mentioned	
(u) Maximum Elevation and Depression Angle (Degree)	<u>To be mentioned</u>	
(v) Maximum Traversing (Moving of gun in all direction) (Degree)	<u>To be mentioned</u>	
(w) Dimension of the Cartridge, the Gun can Fire (mm)	To be mentioned	
(x) Compatibility/ Type of Ammunition it can Fire	To be mentioned	
(y) Ammunition Loading System	<u>To be mentioned</u>	
(3) Operating/ Storage Condition		
(a) Operating Temperature Range	<u>-10° +55°C</u>	
(b) Storage Temperature Range	<u>-10° +55°C</u>	
(c) Maximum Permissible Humidity Condition for Operation	<u>100%</u>	
(d) All Weather, Day and Night Target Engagement Capacity	<u>To be mentioned</u>	
(4) Miscellaneous		
(a) Provision of Assembling and Disassembling of 20 mm Turret Gun System	<u>To be mentioned</u>	
(b) Operation Manuals	<u>To be provided as per requirement of user directorate (EME Dte)</u>	
(c) Maintenance Manuals	<u>To be provided as per requirement of user directorate (EME Dte)</u>	
(d) After Sale Service	<u>Minimum 15 years</u>	

RESTRICTED

Serial	Description	Tech Spec	Ref
	(e) Model Validity	<u>Minimum 15 years</u>	
	b. Hard Points with Provisions for a Combination of Rocket and Missile System.		
	<u>(1) Number of Hard Points</u>	<u>Minimum 4</u>	
	(2) Total Weaponry Pay Load of Hard Points	<u>To be mentioned</u>	
	(3) Type of Missile/ Rocket the System can Carry	<u>To be mentioned</u>	
	(4) Total Number of Missile/ Rocket the System can Carry	<u>To be mentioned</u>	
	(5) Capability of Firing Multiple Missile at a Time	<u>To be mentioned</u>	
	(6) Total Number of Launcher Available	<u>To be mentioned</u>	
	(7) Life of Launcher	<u>To be mentioned</u>	
	c. Long Range Anti-tank Missile and Air-to-Air Missile Against Aerial Targets.		
	(1) Air-to-Air Missile		
	(a) System of Configuration	<u>To be mentioned</u>	
	(b) Type of Warhead	<u>To be mentioned</u>	
	(c) Caliber of Missile	<u>To be mentioned</u>	
	(d) Weight of Missile	<u>To be mentioned</u>	
	(e) Length of Missile	<u>To be mentioned</u>	
	(f) Type of Fuse	<u>To be mentioned</u>	
	(g) Self Destruction Time	<u>To be mentioned</u>	
	(h) Maximum Range	<u>To be mentioned</u>	
	(i) Effective Killing Radius	<u>To be mentioned</u>	
	(k) Single Shot Killing Probability		
	(1) Air Craft	<u>To be mentioned</u>	
	(2) Missile	<u>To be mentioned</u>	
	(l) Maximum Target Speed	<u>To be mentioned</u>	
	(m) Type of Target	<u>To be mentioned</u>	
	(2) For Anti-Tank Missile		
	(a) Type of Warhead	<u>To be mentioned</u>	
	(b) Caliber of Missile	<u>To be mentioned</u>	
	(c) Length of Missile	<u>To be mentioned</u>	
	(d) Weight of Missile	<u>To be mentioned</u>	
	(e) Rate of Fire (Day/ Night)	<u>To be mentioned</u>	
	(f) Maximum Range	<u>To be mentioned</u>	
	(g) Armor Penetration Capability	<u>To be mentioned</u>	
	(h) Laying Angle	<u>To be mentioned</u>	
	(1) Azimuth	<u>To be mentioned</u>	
	(2) Elevation	<u>To be mentioned</u>	
	d. Air to Ground Missile	<u>To be mentioned</u>	
	(1) Ammunition	Details to be mentioned for each ammunition	
	(a) Nomenclature	<u>To be mentioned</u>	
	(b) Make/Model/Type	<u>To be mentioned</u>	
	(c) Country of Origin	<u>To be mentioned</u>	
	(d) Country of Manufacture	<u>To be mentioned</u>	
	(e) Country of Assembly	<u>To be mentioned</u>	
	(f) Year of Manufacture	<u>Not before the contracted year</u>	
	(g) Alternative source	<u>To be mentioned</u>	

RESTRICTED

	Description	Tech Spec	Rem
	(h) Interoperability	To be mentioned	
	<u>Ammo</u>	Details to be mentioned for each ammo	
	a. Nomenclature	To be mentioned	
	b. Make/Model/Type	To be mentioned	
	c. Country of Origin	To be mentioned	
	d. Country of Manufacture	To be mentioned	
	e. Country of Assembly	To be mentioned	
	f. Year of Manufacture	Not before the contracted yr	
	g. Interoperability	To be mentioned	
48.	Target Identification and Sighting System	a. Must allow multi target selection capability simultaneously day or night. b. Must have provisions for independent control of both pilot and gunner.	
49.	Helmet Mounted Cueing Sys (HMCS) (optional)	To be mentioned	
	<u>Additional systems</u>		
50.	a. Sand filter/ ice filter/ rain protection system	Must have provision	
	b. Defogging	Must have provision	
	c. Anti-icing	Must have provision	
51.	List of Standard Accessories	Detail list with country of manufacture	
52.	List of Optional Accessories	Detail list with country of manufacture	
53.	Model Validity	Minimum 15 years	
54.	Colour (As per user requirement)	To be provided	
55.	Warranty	02 Years complete warranty to be available. Details to be mentioned.	
56.	Publications	Under mentioned manual/ catalogues are to be provided for each helicopter	
		a. Original flight manual(in English)	
		b. Original maintenance manual(in English)	
		c. Original spare parts catalogue in English)	
		d. Original spare parts price list	
<u>PART-3: TRAINING REQUIREMENT</u>			



RESTRICTED

Serial	Description	Tech Spec	Rem
57.	User Training (Operation and Maintenance Training)	<p>To be provided. Cost to be mentioned for the following training separately:</p> <p>a. Pilot flying training including instructor and maintenance check flight.</p> <p>b. Pilot armament and firing training.</p> <p>c. Pilot tactical training for the tactical flying techniques of attack helicopter.</p> <p>d. Various levels of repair maintenance and troubleshooting training for independent field and base maintenance.</p>	

PART-4: REPAIR AND MAINTENANCE REQUIREMENT LESS LIST OF SPARES

58.	Level of Repair	Details to be mentioned	
59.	Manuals for Preventive Maintenance and Repair	Details to be mentioned	
60.	Provision of Repair Maintenance and after Sales Service Support	Details to be mentioned	
61.	<p>Books & Publications:</p> <p>a. Owners/ operators manual in English (book type) including CD/ DVD</p> <p>b. Workshop/ repair manual in English (book type) including CD/ DVD</p> <p>c. 100% updated master spare parts catalogue in English (book type) including CD/ DVD</p> <p>d. Complete and updated master spare parts price catalogue/ list in English (book type) including CD/ DVD</p>	<p>To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)</p> <p>To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)</p> <p>To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)</p> <p>To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)</p>	

PART-5: LIST OF SPARES

62.	List of Standard Spare Parts, Tools and Accessories	Details to be mentioned	
-----	---	-------------------------	--

RESTRICTED

Serial	Description	Tech Spec	Rem
63.	List of 5% Spare List (fast and slow moving item)	Fast and Slow moving spare parts list to be provided	
PART-6: TOOL LIST FOR DIFFERENT LEVEL OF MAINTENANCE			
64.	Analyzing, Measuring, Testing/ Fault Finding and Diagnostic Set	To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)	
65.	Special Service Tools (SST)	To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)	
66.	Special Service Materials (SSM)	To be provided (As per requirement to Electrical and Mechanical Engineers Directorate)	
PART-7: FINANCIAL SPECIFICATION			
67.	Financial Implication/ Specifications	Payment related options and issues in details to be mentioned. Price may be mentioned during tender submission.	

