

ANNEX D TO
TENDER NO 06.06.0000.279.07.199.25
DATED 12 NOVEMBER 2025

**TECHNICAL SPECIFICATION FOR PROCUREMENT OF ELECTRONIC GROUND POWER UNIT (EGPU).
CAPACITY: MINIMUM 90 KW (CONTINUOUS), OUTPUT: 115/200V AC, 3 PHASE, 400HZ AND 28 V DC**

Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
1.	Nomenclature	Electronic Ground Power Unit (eGPU)	
2.	Utility/Purpose	The purpose of Electronic Ground Power Unit (eGPU) is to supply power to start aircrafts/helicopters of BAF (like Yak-130, MiG-29, K-8W, C-130, AN-32, L-410, GROB-120 aircraft and MI-17, MI-171, MI-171Sh, AW-139, AW-119, Bell-206 and Bell-212 helicopter) on ground.	
3.	Brand	To be mentioned by the bidder	
4.	Model	Latest production during tender	
5.	Type	Plug and play type Electronic Ground Power Unit (eGPU)	
6.	Country of Origin	USA, UK, Canada, Switzerland, Australia, Norway, New Zealand, Japan and EU Countries.	
7.	Country of Manufacturer	USA, UK, Canada, Switzerland, Australia, Norway, New Zealand, Japan and EU Countries.	
8.	Name of the Manufacturer with full address	To be mentioned by the bidder.	
9.	Name of the Principal with full address	To be mentioned by the bidder.	
10.	Name of the Local Agent with full address	To be mentioned by the bidder.	
11.	Specifications of Battery		
	a. Type of Battery	Lithium-Iron Phosphate (LFP), maintenance-free, deep-cycle, long-life (≥ 3000 charge/ discharge cycles)	
	b. Battery and BMS Requirements	Battery chemistry shall be Lithium Iron Phosphate (LiFePO ₄). The Battery Management System (BMS) shall provide: full cell-level monitoring and balancing, over-voltage and under-voltage protection, over-current protection, thermal sensors at cell and module level, automatic isolation contactor and fail-safe disconnect, detailed SOC and SOH reporting, event logging (≥ 12 months of data), and remote telemetry interface (CAN/Modbus/TCP - vendor to specify). Required certificates on delivery: UN 38.3 test report, IEC 62133 or equivalent and cell/pack test reports. Vendor shall provide cell manufacturer traceability and a statement on thermal runaway mitigation.	
	b. Country of origin of Battery	USA, UK, Canada, Japan, South Korea, EU Countries and China.	
	c. Name of the manufacturer of the Battery	To be mentioned by the bidder	
	d. Number of Battery	To be mentioned by the bidder	

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Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
	e. Voltage, Ampere and Capacity of each Battery	To be mentioned by the bidder	
	f. Life Cycle	≥3000 cycles @80%DoD	
	g. Energy Density	160-180 Wh/Kg	
	h. Discharge Rate	To be mentioned by the bidder	
	j. Capabilities of addition of Battery	To be mentioned by the bidder	
	k. Number of starts in full charged condition	To be mentioned by the bidder	
	l. Replacement warranty of battery pack	Minimum 5 years replacement warranty and a performance guarantee: battery usable capacity ≥80% of nameplate after 3000 cycles at 80% DoD (vendor must provide supporting test data). Vendor must guarantee spare module and replacement parts availability for at least 15 years.	
	m. Type of Charger	On board fast charger compatible to equipment along with necessary charging cable (Charging time for full charge is to be mentioned)	
	n. Capacity of Charger	To be mentioned by the bidder	
	p. On-board Charger	Vendor must state charger power (kW), maximum charge current, charge profile (CC-CV), time to 80% from 20% SOC and time to 100% from 0% SOC at nominal mains, input power factor (≥0.95) and harmonic distortion. Charger must include active power factor correction and meet IEC 61000-3-2 for harmonic currents.	
	q. Input Cable and Plug	20 meter long (minimum) 3 phase connecting Plug (both male and female)	
	r. Test Bench Report	Test bench report for capacity of each battery is to be provided with unit.	
	s. Certifications and Safety Compliance	The following certificates and test reports must be submitted in English language along with the offer. Failure to provide any of these documents will render the offer non-compliant: (1) UN 38.3 Test Report – Official test report from a certified laboratory confirming that the battery pack has successfully passed UN Manual of Tests and Criteria, Part III, Subsection 38.3 for safe transportation of lithium batteries. (2) IEC 62133 Certificate – Certificate of compliance for the battery pack (or equivalent UL/EN standard) demonstrating compliance with international safety requirements for secondary lithium cells and batteries. (3) Material Safety Data Sheet (MSDS) – Manufacturer-issued MSDS for the battery cells and the complete battery pack, including chemical composition and handling precautions.	



Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
		(4) Battery Pack Manufacturer Test Bench Report – Original test bench performance report (capacity, cycle life, safety tests) issued by the battery pack manufacturer. (5) Cell Traceability Document – Document from the battery pack manufacturer showing the source, manufacturer name and batch/lot number of the individual cells used in the pack. (6) Pack-Level Compliance Certificate – Certificate showing compliance of the battery pack to applicable UL/IEC standards (e.g., UL 1973, UL 2580, or IEC 62619), as appropriate for aviation ground power applications. (7) Transport Compliance certificate from the manufacturer or authorized agent that spare batteries and packs conform to IATA/ICAO Dangerous Goods Regulations (DGR) for air transport of lithium batteries. All certificates and reports must be authentic, signed/stamped by the issuing authority and submitted as original or notarized copies. Unsigned, undated, or draft documents will not be accepted.	
12.	Output of the Electronic Ground Power Unit (eGPU):		
	a. Output Power	AC rating: 90 kW continuous at 115/200 V AC, 3-phase, 400 Hz (nominal). DC rating: 28 V DC continuous at vendor-declared amperage (A) and peak/inrush capability. Bidders must state: (i) continuous AC power (kW), (ii) AC line-to-line and line-to-neutral voltages, (iii) AC rated current (A) at unity power factor and at vendor-declared power factor, (iv) continuous DC power or DC continuous current (A) at 28 V, and (v) maximum combined AC+DC power the unit can supply simultaneously. For simultaneous operation, bidders must provide a derating/power-sharing table showing AC and DC available when both are in use.	
	b. Output Voltage	(1) 115/200 V AC, 3 Phase, 400 Hz (2) 28 V DC (3) 115/200 V AC, 3 Phase, 400 Hz and 28 V DC simultaneously	
	c. Output Current	(i) AC rated current: vendor is to specify amperes at 90 kW for PF=1 and at declared PF. (ii) DC rated current: vendor is to specify continuous DC current at 28 V and peak/inrush capability (A) including duration. (iii) Vendor must provide formula and calculation sheet used to size AC and DC currents and a power-sharing/derating table for simultaneous operation.	
	d. Power Factor	To be mentioned by the bidder (if any)	

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	e. Voltage Regulation	$\leq \pm 0.5\%$ for balanced linear loads from 10% to 100% load. For unbalanced single-phase loading, per-phase voltage deviation shall not exceed $\pm 2\%$ for up to 30% single-phase imbalance; vendor to provide proof test data. Transient voltage dip on 0→100% load step shall be $\leq 8\%$ and recover to within $\pm 0.5\%$ within 50 milliseconds (vendor must supply measured waveform in FAT).	
	f. Voltage Recovery	$\Delta < 8\%$ and recovery time 10 ms to 100% load change	
	g. Total Harmonic Distortion	$< 2\%$ (linear load)	
	h. Output delay timer	Power output delivery delay time should be less than 10 seconds (if delay timer is fitted in the Ground Power Unit)	
13.	Protection & Safety Requirements (all protection and alarm functions must be factory-tested and verified during FAT and SAT. Non-functional or partial compliance will not be accepted):		
	The Ground Power Unit shall incorporate comprehensive protection and indication systems to ensure safety of aircraft, operators, and equipment. The following protections and alarms are mandatory:		
	a. General Electrical Protection:		
	(i) Over-voltage and under-voltage protection		
	(ii) Over-current and overload protection		
	(iii) Short-circuit protection (including DC crowbar for DC output)		
	(iv) Inverse polarity protection for DC connections		
	(v) Control voltage error protection		
	(vi) Internal high temperature protection with automatic shutdown		
	(vii) No-break power transfer capability		
	(viii) Neutral voltage supervision and neutral voltage displacement protection		
	(ix) Leakage current supervision with earth-leakage trip sensitivity ≤ 30 mA		
	b. Mechanical & Environmental Protection:		
	(i) Protection class minimum IP55 for the unit		
	(ii) Battery compartment with ventilation, smoke/gas detection, and provision for manual/automatic fire suppression		
	(iii) Thermal runaway detection with automatic battery isolation and warning		
	c. Interlocks & Safety Features:		
	(i) Soft-start on AC output		
	(ii) Plug insertion interlock with mechanical keying		
	(iii) Automatic shut-down and alarm in case of unsafe connection or fault condition		
	d. Indications & Alarms:		
	(i) Separate beacon/indicator for "Operation" and "Charging" status		
	(ii) Beacon/indicator for "Low Battery Warning"		
	(iii) Audio/visual alarms for all fault conditions (overload, over-temperature, leakage, etc.)		
14.	Control Panel	User friendly Plug and Play type.	

Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
15.	Environmental		
	a. Operating Temperature	-10°C to +55°C without additional heating/ cooling. (Vendor to declare derating above 40°C)	
	b. Relative Humidity	10–95% non-condensing, tropicalized for high humidity and salt-laden atmosphere.	
	c. IP rating	IP55 minimum for full unit	
	d. Noise Level	≤60 dB(A) measured at 7 m under full continuous rated load in free field	
	e. Sensitive electronic enclosures	IP56/IP65 required	
	f. Environmental test reports (temperature, humidity, salt spray, vibration, shock)	MIL-STD-810	
16.	Canopy of the Electronic Ground Power Unit (eGPU)	All the equipment should be fully protected from rain/sun by sliding zinc coated canopy which allows unrestricted access to major equipment. It should be able to operate in hot humid monsoon prone region.	
17.	Metallurgical Treatment	Anti-corrosive treatment must be given on all parts of the Ground Power Unit prone to corrosion.	
18.	Output Power Cable	Following Output Power Cable must be fitted with each Ground Power Unit: a. One output cable 115/200 VAC, 400 Hz, 3 Phase, 04 wire (at least 15 meters long) with a standard 06 pin aircraft adapter. b. Output cable for 28 VDC, 1500 amperes (at least 10 meter long) with a standard 03 pin flat adapter. c. All the output power cable must be covered with insulated rubber material.	
19.	Cable box/ tray	Vendor must confirm compatibility of supplied 6-pin 400 Hz aircraft adapter and 3-pin 28 V DC flat adapter with Yak-130, MiG-29, C-130, AN-32, L-410, MI-17 family, AW-139 and other listed aircraft. Cables shall be flexible silicone-insulated, rated for outdoor use, temperature – 40°C to +90°C, minimum lengths: 15 meter. Storage reels or trays shall be provided with mechanical protection.	
20.	28 VDC Power Socket	One standard two pin, 15 amps, 28 VDC socket with a "ON-OFF" switch should be fitted in the power control board and it must be easily accessible to use.	
21.	Operation Cycle	The Electronic Ground Power Unit (eGPU) should be able to operate for min 06 hours continuously. The bidder is to specify about the operation cycle of the offered Electronic Ground Power Unit (eGPU).	
22.	Electrical Equipment/ Aggregate	The country of origin of all the electrical equipment/ aggregate, control instrument and other accessories should be from the stated countries mentioned in clause number 6	
23.	Dimension, Volume and Weight of overall eGPU	To be mentioned by the bidder.	

Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
24.	Towing System	(1) Self-Propelled Power Pusher/ Towing system is to be incorporated with the Electronic Ground Power Unit which would be capable to tow or draw the eGPU around the tarmac area (standard self-propelled towing system is to be mentioned by the bidder with brochure and specifications). (2) Lockable tow bar interlock with standard tow eye.	
25.	Mobility and Towing	Maximum towing speed ≤ 15 km/h. Operational speed limiter/governor must be provided with selectable settings (5 km/h, 10 km/h, 15 km/h). Unit shall include parking brake interlock; emergency stop switches and audible reversing alarm.	
26.	Lighting System	The following lighting system must be available: a. Clearly visible flashing beacon light on top of the eGPU and 'NAV' light qty-04 (blue & red) on roof (front & rear corner). b. Flashing indication lights during moving.	
27.	Tyre and Wheels	a. The Electronic Ground Power Unit must be incorporated with two axle four wheel (front axle center pivoted for 60° left/ right turn able). b. Size of wheels of pneumatic tyres with drum is to be mentioned by the bidder. c. 01 x set of wheels is to be provided as spare.	
28.	Braking System	Manual wheel brake provision must be available.	
29.	Body and Chassis	a. Body must be of steel and fabricated with steel trolley. b. Ground clearance of trolley should not be less than 180 mm.	
30.	Color	a. Canopies should be painted with fleet white or golden yellow gloss color. b. Cable boxes, Noise boxes, chassis, wheels, bumpers, mudguards, fuel tanks, etc should be painted with standard black colors.	
31.	Standard Fittings	a. All safety devices are to be incorporated as per the international standard. b. All types of fittings are to be done by the manufacturer as per the requirement of the user. c. Any other things required to operate the Electronic Ground Power Unit (eGPU) smoothly to be provided by the bidder within the quoted price.	
32.	EMC & Grounding	Electromagnetic Compatibility (EMC): a. The unit shall comply with either MIL-STD-461 (latest revision) or IEC 61000 series standards (vendor to specify). b. Minimum compliance shall include: (i) Conducted Emissions (CE) (ii) Radiated Emissions (RE) (iii) Conducted Susceptibility (CS) (iv) Radiated Susceptibility (RS) c. Surge immunity shall comply with IEC 61000-4-5. d. Vendor must submit valid EMC test reports from an accredited laboratory. Self-declarations will not be accepted.	



Ser No	Description	Specification Specified	To be filled up by the Manufacturer/ Principal
		Grounding: a. The eGPU shall be supplied with an aircraft grounding clamp, cable and reel. b. Ground continuity between clamp and unit chassis shall not exceed 1.0Ω when connected to aircraft ground point. c. Vendor shall demonstrate grounding effectiveness during FAT and SAT. Documentation: a. Complete EMC compliance certificates, test reports and grounding test results must be submitted in English language with the offer. b. Offers without authentic EMC certificates/test reports will be treated as non-compliant.	
33.	For standard tools, and accessories are to be supplied with each Electronic Ground Power Unit (eGPU) by the suppliers:	a. One Dry chemical fire extinguisher of capacity 5-10 Kg for each Electronic Ground Power Unit (eGPU). b. One spare wheel assemblies (loose) complete with tyre and tube for each Electronic Ground Power Unit (eGPU). c. One set (qty-02) lifting jack for each Electronic Ground Power Unit (eGPU). d. Wheel removing tools for each Electronic Ground Power Unit (eGPU). e. 01 x Tools box with sufficient tools. But bidder is to submit a list of tools to be supplied with Electronic Ground Power Unit (eGPU) mentioning type and quantity with the offer.	
34.	Publications	Following Publications are to be supplied along with each Ground Power Unit: Manuals: Maintenance manuals, Operation manuals, Illustrate Parts Catalogue & Illustrate Parts Breakdown (with detail description and part number of items at component level and detailed drawing, circuit diagram etc), Repair & Workshop manual and trouble-shooting manual each 02 copies are to be provide with each Electronic Ground Power Unit (eGPU) together with Power Pusher/ Towing system. Supplier is to provide 02 x soft copy (CD) of the manuals/ publications and related software (if available) required for maintenance/ rectification of the power unit and Prime Mover separately.	
35.	The supplied Electronic Ground Power Unit (eGPU) must be equipped with all standard fittings and accessories.		

TERMS AND CONDITIONS FOR PROCUREMENT OF ELECTRONIC GROUND POWER UNIT (eGPU) IN FY 2025-26

The bidder is to mention "Comply/Not Comply/Appropriate Remarks against each terms & condition mentioned below. Otherwise the quotation will not be accepted.		
Ser No	Description	To be Filled up by the Bidder
1.	<u>Product Condition and Certification.</u> All the items equipped with the Electronic Ground Power Unit must be brand new, unused and latest product (not earlier than the year of 2026) with necessary accessories and standard fittings. The supplier/manufacturer is to provide Original Equipment Manufacturers (OEM) certificate mentioning the date (month and year) of manufacturing of the Electronic Ground Power Unit in English language. A declaration must be provided by the OEM that the offered system is free from any reconditioned, refurbished or second-hand components.	
2.	<u>Country of Origin Verification.</u> All major components of the eGPU (self-propelled electric towing equipment, inverters, control system, batteries, protection equipment etc) must be sourced from and manufactured in the specified countries only. Proof of origin (OEM certificate or customs-origin certificate) must be submitted.	
3.	<u>Authorization from OEM.</u> Authorization certificate (original) in favor of the Principal by the OEM is to be submitted along with the offer in English language.	
4.	<u>Authorization for Local Agent.</u> Authorization certificate (Original) in favor of the local agent by the principal is to be submitted along with the offer in English language.	
5.	<u>Submission of Specifications and Annexes.</u> The technical specifications and all annexed terms must be duly filled out by the Principal or Manufacturer and submitted with the offer, following the provided guidelines/instructions.	
6.	<u>Compliance with Brochure Specifications.</u> The offered technical specifications must match those in the official brochure/catalogue. Photocopies, faxed, handwritten or unmarked/unsigned brochures will not be accepted.	
7.	<u>Offer Format.</u> Handwritten offers or clarifications will not be accepted. All documents must be typed and printed on the official letterhead of the Manufacturer or Principal and duly signed by the authorized signatory.	
8.	<u>All-weather Certification.</u> The supplied Electronic Ground Power Unit (self-propelled electric towing equipment) should be capable of operating in all-weather condition. A certificate in this regard is to be submitted along with the offer in English language.	
9.	<u>Certification.</u> Following certificates (if certified) are to be submitted along with the offer in English language: a. ISO (9001) standard (for both the eGPU and battery manufacturer). b. Explosion proof certificate for battery by the manufacturer of the battery. c. Certification from the battery manufacturer confirming that the battery is custom-designed for use in the aviation industry.	
10.	<u>Standard tool kit and accessories.</u> Tool kit and accessories must comply with Technical Specification Clause 32, and a list must be submitted with the offer.	
11.	<u>Fast and Slow- moving spares.</u> The bidder is to quote the cost of fast and slow-moving consumable spares separately which will be required for the first two years of maintenance. Bangladesh Air Force will have the option to accept/reject part or entire list of the spares.	
12.	<u>Original technical brochure/booklet.</u> Original technical brochure/booklet of the Electronic Ground Power Unit along with self-propelled electric towing equipment from OEM is to be submitted along with the offer in English language.	
13.	<u>Permanent Markings.</u> All types of marks/indications/instruction must be engraved in English language on the body of the Electronic Ground Power Unit.	
14.	<u>Submission of Original Offer and Brochures.</u> Original offer (with proper signing at every page) along with original brochure for all the major equipment in English (02 x original copies for DGDP and 01 x original copy for Directorate of Supply and 01 x copy for Directorate of Engineering) of Electronic Ground Power Unit having all the relevant information including color photographs of all major equipment along with details of technical information with proper marking and sign, name, designation, telephone number, fax number, email and mail address must be submitted.	

Ser No	Description	To be Filled up by the Bidder
15.	Quality Assurance Certificate. The supplier/manufacturer is to provide Quality Assurance Certificate of the Electronic Ground Power Unit in English language.	
16.	Delivery Timeline. Delivery of the Electronic Ground Power Unit is to be completed within 300 days after signing the contract.	
17.	Delivery Location. The bidder is to deliver the Electronic Ground Power Unit at 201 Maintenance Unit, Bangladesh air Force within one month after customs clearance at Chattogram by the Embarkation Unit, Bangladesh Air Force. The eGPU is to be brought from Chattogram to Dhaka by the supplier's/ local agent's expense and arrangement.	
18.	Packing Standard. The item/items must be supplied in standard Air/Sea worthy packing suitable for safe international transportation.	
19.	Technical Publications. The following publications must be supplied in English along with each Electronic Ground Power Unit, covering both the Power Unit and self-propelled electric towing equipment: a. Hard Copy Manuals (2 sets each for Power Unit and self-propelled electric towing equipment): (1) Operation Manual (2) Maintenance Manual (3) Repair & Workshop Manual (4) Troubleshooting Manual (5) Illustrated Parts Catalogue (IPC) (6) Illustrated Parts Breakdown (IPB) with component-level descriptions, part numbers, circuit diagrams, and detailed schematics. b. Soft Copies: Two (02) sets of all the above publications must be provided in CD/DVD/USB format (PDF or other commonly used file format). Any relevant software or firmware tools for diagnostics, maintenance, or configuration must also be included (if applicable). c. Additional Deliverables: (1) Factory Test Certificates (for power unit, inverters and batteries) (2) Electrical Test Data Logs (3) Warranty Certificates (4) As-Built Drawings and Wiring Diagrams All documents must be clearly legible, properly indexed and printed on durable quality paper. Diagrams must include fault isolation and maintenance flowcharts wherever applicable.	
20.	Port of Shipment. The port of shipment must be from the manufacturer's country.	
21.	List of Spares and Long-Term Support Commitment. The supplier/manufacturer must submit a comprehensive list of spare parts required for the continued operation and maintenance of the Electronic Ground Power Unit for a minimum period of 15 (fifteen) years beyond the warranty period. The list must: a. Clearly categorize spares into: (1) Fast-moving consumables (2) Critical components (e.g., inverters, controllers, relays, power cables) b. Include OEM part numbers for all items to ensure traceability and prevent substitution with substandard or non-original items. c. Be accompanied by a guarantee certificate from the supplier/manufacturer ensuring the availability of the listed spares in the local market (Bangladesh) or through their local agent for a period of 15 years. d. Bangladesh Air Force reserves the right to: (1) Accept or reject any part or the entire list of spares. (2) Request documentary proof of stock or supply chain commitment (such as inventory data, warehouse capacity, or annual stocking plan) specifically for critical spares from the local agent. This clause is binding and any failure to ensure spare availability during the committed period may lead to penalties, blacklisting or future procurement disqualification.	

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22.	<u>After-sales certification.</u> After-sales service should be available with the local agent of the supplier and is to be provided as and when required for 15 years (free of charge up to the warranty period and thereafter on payment). A guarantee certificate in this regard is to be provided by the local agent along with the offer in English language. The local agent must have an operational workshop or service facility in Bangladesh. Details including location, scope and contact personnel must be submitted. Response time for after-sales support must not exceed 7 working days after complaint.	
23.	<u>Warranty and Maintenance Support.</u> - A minimum 2-year comprehensive warranty, covering parts and labor, shall be provided from the date of commissioning. - The warranty must cover both the eGPU system and self-propelled electric towing equipment. - The supplier must provide local service center details or a technical support plan, including contact information, address, and response time, with the offer. - A 24-month warranty shall also apply from the date of acceptance by BAF. The warranty period will pause upon defect reporting and resume after receipt of a serviceable/replacement unit to ensure full coverage. - If the eGPU or any part is found defective/unserviceable during pre-receipt inspection, post-delivery, or within warranty, the supplier must replace it at own cost within 60 days. Any delay beyond 60 days will extend the warranty period accordingly. - Replacement must be of the same make/model or an upgraded version with equal or better specifications. All transport, customs, and installation costs shall be borne by the supplier.	
24.	<u>Pre-Shipment Inspection (PSI).</u> Pre-Shipment Inspection (PSI) of the Electronic Ground Power Unit will be carried out by 02 x BAF personnel {01 x Engineering Officer (M) and 01 x technician of E&I (elec) trade} for the duration of 05 working days (excluding journey period) at least 60 days before date of shipment. All cost related to PSI team including both ways air ticket, food and accommodation and other related charges will be borne by Bangladesh Air Force. However, the supplier is to arrange local transport, medical and all the admin formalities of the team. The supplier is to extend all possible assistance to the team for checking the documentation including physical checking of the Electronic Ground Power Unit. The supplier should inform about the date of the pre-shipment inspection at least 08 weeks prior to the exact date of carrying out the pre-shipment inspection. During PSI, following will be checked: - Visual inspection of the Electronic Ground Power Unit along with all the equipment. - Certificate of conformity and test data logs for each eGPU. - Documentation (log book, quality certificate etc) as per the contract. - A factory acceptance test (FAT) checklist in advance for BAF approval. - Test equipment and calibration certificates during PSI.	
25.	<u>Joint-Post Shipment Inspection/acceptance.</u> Post Shipment Inspection/acceptance of the Electronic Ground Power Unit will be carried out at Bangladesh Air Force site in presence of representative of supplier's specialist/representative of local agent and representatives of Bangladesh Air Force. In the process of post-shipment inspection/acceptance, the following shall be checked. - Visual Inspection: 100% visual inspection of the equipment, spare parts, SST, SSM, and publications to ensure compliance with technical specifications. - Verification of brand, make, model, year of production, country of origin, and place of manufacture/assembly for the main equipment and major components. - Documentation: - Shipping invoice/documents mentioning the name of the ship and port. - Manufacturer's certificates stating that the Electronic Ground Power Unit is manufactured by them. - Quality certificate of the Electronic Ground Power Unit duly signed by the manufacturer's quality inspector and the year of production is to be mentioned in the Quality Certificate. - All relevant manuals of individual equipment.	

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	c. Performance test of all the equipment (as applicable). The following tests are prerequisite for acceptance: (1) AC continuous power test at 25%, 50%, 75% and 100% load for ≥ 30 minutes each, recording voltage, frequency ($400 \text{ Hz} \pm 0.1\%$), current, PH, THD. (2) DC Continuous current test at rated current for 30 minutes: inrush test at 1500 A for 30 s with voltage recovery measurement. (3) Simultaneous AC+DC load test per vendor-declared rating. (4) Battery discharge/start/ cycle test: demonstrate aircraft engine start profile: vendor to declare and provide excepted starts per full charge. (5) Protection function test: over-current, short-circuit, earth leakage, thermal cut-out, plug internet. (6) BMS function test including fault simulations. (7) Mechanical/towing/braking test. (8) Verification of manuals, wiring diagrams and spare parts list. Failure of these critical tests shall constitute grounds for rejection.	
26.	<u>On-Site Familiarization Training.</u> On-site familiarization training on repair, maintenance and troubleshooting shall be conducted by qualified engineer or specialist (one or two as deemed necessary by the OEM) of the manufacturer for a group of BAF personnel in Bangladesh for 05 (five) working days or as deemed necessary by the OEM. Training will commence only after successful completion of the functional test and inspection. BAF prefers the training to be offered free of cost. If free training is not possible, the bidder shall quote the training cost separately, which will be included in the financial evaluation of the contract. For foreign specialists, the bidder shall bear all associated expenses including air tickets, accommodation, food, medical care, and transportation (both internal and external). BAF reserves the right to accept or reject the training offer. Training content must cover: - Startup and shutdown procedures - Fault diagnosis and reset - Preventive maintenance tasks - Safety protocols A training completion certificate signed by BAF attendees must be provided at the end of the session.	
27.	<u>Financial Offer Requirements.</u> Bidders are to submit their Financial Offer (price quotation) in the offer separately mentioning as follows. - Price of Electronic Ground Power Unit including freight charge. - Cost of local training (which will be included in the financial part of the contract. Bangladesh Air Force has the option to accept/reject the training). - Cost of Fast- and slow-moving spare parts as mentioned in the clause 11.	
28.	<u>Technical Acceptance Requirements.</u> Lowest technically accepted bidder will be selected considering the offered price of the following items: - Price of Ground Power Unit (Vehicle Mounted). - Quoted price for local training. - Cost of Fast- and slow-moving spare parts. - Freight charge.	
29.	<u>Rejection statement.</u> Part-shipment and Part-payment of the Electronic Ground Power Unit will not to be accepted.	

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Ser No	Description	To be Filled up by the Bidder
30.	<u>Compliance Statement.</u> The bidder is to mention comply/not comply/appropriate remarks against each clause/serial-number of the Technical Specification and Terms & Conditions as per the sequence. Mentioning 'Comply' against any tender specification will be considered that the bidder is fully agreed with the requirement of that particular clause.	
31.	<u>Inland Transportation.</u> The transportation from Chattogram to Dhaka is to be arranged and borne by the supplier or local agent. The supplier shall be responsible for rectifying any damage, loss or discrepancies occurring during transit.	
32.	<u>Contract Cancellation Due to Delay.</u> In case of failure to supply the contracted goods within stipulated time, Bangladesh Air Force may cancel the contract.	
33.	<u>Grounds for Disqualification.</u> BAF reserves the right to disqualify any bidder or supplier without prior notice based on previous records of poor performance, which include but are not limited to: a. Abandonment of work. b. Failure to properly complete contracts. c. Significant delays in supply of contracted items. d. History of litigation related to financial failures. e. submission of improper or fraudulent information/ certificate/ document. f. Non-submission of mandatory certificates or documents with the offer.	
34.	<u>Price Validity.</u> No price increment at any stage after submission of offer will be accepted by Bangladesh Air Force.	
35.	<u>Offer Validity and Withdrawal.</u> The offer must remain valid until 30 June 2026. Withdrawal of the offer or indication of unwillingness to supply during the validity period will not be accepted and may result in action against the bidder as per DGDP rules.	
36.	<u>Other terms and conditions.</u> Any other terms and conditions not covered here will be dealt with as per DGDP rules and regulations.	
37.	<u>Quantity and Indent Modification.</u> Bangladesh Air Force has right to reduce or increase the quantity of equipment/items at any stage before concluding the contract.	
38.	<u>Compliance with International Standards.</u> All eGPU components must meet or exceed international aviation ground support standards such as: a. MIL-STD-704F (Electrical Power Compatibility) b. ISO 6858 (Aircraft Ground Equipment) c. CE/UL marking for electrical systems Compliance certificates must be submitted with the offer.	
39.	<u>Performance Guarantee.</u> The supplier must guarantee that the eGPU will meet the technical specifications and performance benchmarks under BAF's operating environment. Any performance shortfall discovered during warranty will require corrective action at the supplier's cost.	
40.	The bidder must mention the full address including Telephone number, Fax number and e-mail address in the offer. The bidder also mentions the name and full address (including Telephone number, Fax number and e-mail address) of the local agent (if any) in the offer.	
41.	Item with changed/ dissimilar part no/ description (if any) is to be mentioned during submission of offer.	
42.	If any change is required in contract/ LC due to fault of supplier, all expenses shall have to be borne by the supplier.	
43.	Normally transshipment is not allowed. However, if the bidder needs transshipment they are to mention in the offer about their requirement. In case of such requirement, the transshipment may only be allowed under single AWB/ BL.	
44.	The bidder is to mention the name of port/country of shipment in the offer.	
45.	Increase of price at any stage after submission of offer will not be accepted by BAF. The offered unit price and total price against each item must be correct. If the unit price or total price of an item is found incorrect, that unit price or total price will be taken into consideration which will be benefited to BAF.	
46.	The bidder is to quote FCA/ FOB cost and freight charges (by both air and sea) separately & clearly in financial offer. If freight is not quoted separately for each item, total freight will be distributed against each item based on its proportionate FCA/FOB cost of all items. Any price/ cost quoted in the pages of quotation other than financial offer will not be considered.	

RESTRICTED

Ser No	Description	To be Filled up by the Bidder
47.	For failure to supply the contracted goods in time, DGDP/ BAF may cancel the contract with necessary punitive action.	
48.	Offer must remain valid till 30 June 2026 from the date of opening the tender. Within the validity of the offer, withdrawal of offer or unwillingness to sign the contract by the bidder will not be accepted and in such cases action would be taken against the principal supplier and local agent as per DGDP rules.	
49.	Delivery schedule mentioned in the tender specifications may be changed by DGDP/ BAF due to delay in concluding the contract. In this case, the contract would be signed within offer validity period. DGDP/ BAF also reserves the right to get the offer validity extended with the consent of the supplier.	
50.	Part Shipment & Part payment: Not allowed.	
51.	100% Payment in foreign currency (FC) will be made through an irrevocable Letter of Credit (LC) opened with scheduled bank in Bangladesh and negotiating bank recommended by the supplier under following terms and conditions: a. 80% of CFR/ CPT value will be released on production of shipping documents to the bank. b. 20% of CFR/ CPT value will be released on satisfactory acceptance of 100% items by BAF after inspection/ functional test (as applicable), on production of Certificate Receipt Voucher (CRV) and written clearance from DGDP.	
52.	AWB/BL must be in the name of consignee	
53.	Bidders are requested to submit soft copy of Financial Offer in a CD according to the given proforma along with the hard copy of Financial Offer in closed envelop.	
54.	Compliance of tender terms & conditions should be mentioned in the offer by the bidder as per sequence above. Bidder is to provide appropriate information against each clause clearly (where necessary) instead of 'complied'/'not complied'. No contradictory/hypothetical sentence/word/(like, quote is subject to availability/prior to sell/subject to export license approval or words so) will be accepted by BAF.	
55.	Any other terms and conditions not covered here will be as per DGDP rules and regulations.	