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06.06.0000.218/Eval/24.04.18

24 April 2017

**RE- EVALUATION OF ANTI -TANK GUIDED WEAPON (MEDIUM RANGE) FOR BANGLADESH ARMY**

Reference:

A. Army Headquarters, General Staff Branch, Infantry Directorate letter number 23.01.901.034.02.026.01.19.04.18 dated 19 April 2018 (Not to all).

1. In view of above reference, please be informed that Bangladesh Army is planning to procure Anti Tank Guide Weapon (Medium Range). Therefore, you are requested to forward offers against subject item as per technical specification attached to this letter directly to Army Headquarters, General Staff Branch, Infantry Directorate by 10 May 2018 fulfilling the requirements mentioned below:

- a. Offer as per technical specification.
- b. Manuals (Original Printed by Manufactures) and CD.
- c. Catalogue (Original Printed by Manufactures) and CD.
- d. Brochure (Original Printed by Manufactures) and CD.
- e. Enlistment Certificate of DGDP.

2. Forwarded for your information and necessary action please

  
ASHFAQ MD SHIBLY  
Major  
For Acting Director General

Annex:

A. Technical Specification of Anti Tank Guided  
Weapon (Medium Range) Total: 09 (Nine) pages only.

Distribution:

External:

Action:

(Enlisted Supplier of Group-4)

Information:

Army Headquarters  
General Staff Branch  
Infantry Directorate

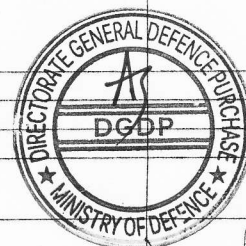
Internal:

Action:

IT Branch – Focus it on Web Site

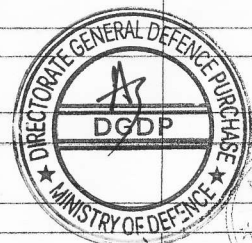
**TECHNICAL SPECIFICATION OF ANTI-TANK GUIDED WEAPON (MEDIUM RANGE)**

Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
<b>Part-1: General Specification</b>				
1.	Nomenclature	Anti-Tank Guided Weapon (ATGW)		
2.	Characteristic	Medium Range (MR)		
3.	Model	Specific model to be mentioned		
4.	Caliber	To be mentioned		
5.	Name of the manufacturer	To be mentioned		
6.	Name of the principal	To be mentioned		
7.	Country of origin	Group B		
8.	Country of manufacture	Group B		
9.	Country of assembly	Group B		
10.	No of crews	2/3		
11.	Generation	2 <sup>nd</sup> and higher		
12.	Year of production	Not before the year of contract		
<b>Part-2: Technical Specification</b>				
13.	<b>Function and Capability</b>			
	a. To be able to aim, track and engage any target (moving or static) direct or indirect role within maximum effective range in all-weather condition both in day and night time	To be mentioned		
	b. To be able to fire from confined space	To be mentioned		
	c. To be able to use on variety of platforms (tripod and vehicle)	To be mentioned		
	d. Should be man portable for short distance	To be mentioned		
	e. Can defeat any Modern Battle Tank or Armoured Fighting Vehicle	To be mentioned		
	f. Can defeat Explosive Reactive Armour (ERA) and Inert Reactive Armour (IRA)	To be mentioned		
	g. Should have cross country mobility	To be mentioned		
14.	<b>Operational Aspects/Requirements</b>			
	a. Effective range (Day)	Minimum 4 km		
	b. Effective range (At night or at poor visible condition)	Minimum 3 km		
	c. Maximum range of the weapon system	To be mentioned		
	d. Minimum effective range	To be mentioned		
	e. Minimum operation angle/ gradient	To be mentioned		
	f. Maximum operation angle/ gradient	To be mentioned		
	g. Effectiveness during Rain and general thunder shower	To be mentioned		
	h. Effectiveness in fog/ mist	To be mentioned		
	j. Altitude (Above sea level)	Up to 2000 m above sea level		
	k. Wind speed	≤ 12 m/sec		
	l. Provision of separated firing capability	To be mentioned		
	m. Overlapping or cross firing using multiple launcher	To be mentioned		

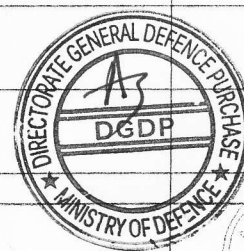


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Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	n. Provision of fire and update method	To be mentioned		
	p. Immunity to counter electronic measure (CEM)	To be mentioned		
	q. Immunity of Detection of Infrared (IR) if IR used	To be mentioned		
	r. Launching platform: (1) Tripod (2) Vehicle	To be mentioned		
	s. Ammo loading system	To be mentioned		
	t. Man portability for short distance	To be mentioned		
15.	<b>Guidance and Control Mechanism of Guidance Control Unit (GCU)</b>			
	a. Guidance System/ Method (Mention only applicable method/ combination of methods): (1) Command to Line of Sight (CLOS)-SACLOS/ ACLOS (2) Homing- Active/Semi-Active/ Passive (3) Beam Riding	To be mentioned		
	b. Gathering	To be mentioned		
	c. Tracking and guidance	Semi-Automatic or Automatic		
	d. Formation of control command	To be mentioned		
	e. Possibility of interference of command link	To be mentioned		
	f. Provision of integrated self-test system prior operation	To be mentioned		
	g. Provision of testing equipment/ device in the field	To be mentioned		
	h. Provision of integrating night firing device/Thermal Imager	To be mentioned		
	j. Waterproofness of GCU	To be available		
	k. Storage condition (Under normal ambient temperature condition)	To be mentioned		
	l. Carrying facilities/Provision of back pack and harnesses	To be mentioned		
	m. Triggering positions (Details to be mentioned)	To be mentioned		
	n. Provision of safety in trigger/launch button	To be mentioned		
16.	<b>Performance</b>			
	a. Combat rate of fire (Missile per minute)	To be mentioned		
	b. Single shot hit probability or accuracy (Moving target)	> 90%		
	c. Single Shot Hit Probability or accuracy (Static Target)	> 95%		
	d. Operational temperature range	- 20 ° C to + 50 ° C		
	e. Operational humidity range	Minimum 95%		
	f. Ready to combat state (Time)	< 1-3 min		
	g. Speed of the Missile	To be mentioned		
	h. Time of Flight to Maximum Range	To be mentioned		
17.	<b>Warhead Performance</b>			
	a. Type of warhead	To be mentioned		

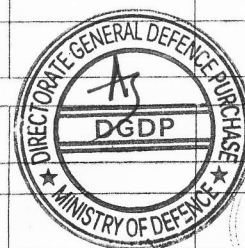


Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	c. Minimum angle of attack	To be mentioned		
	d. Top attack capability	To be mentioned		
	e. Provision of thermobaric warhead	To be mentioned		
	f. Detonation process	To be mentioned		
	g. Fuze arming distance	To be mentioned		
	h. Type of fuze	To be mentioned		
	j. Self destruction capacity	To be mentioned		
	k. Name and type of main filling	To be mentioned		
	l. Weight of main filling	To be mentioned		
	m. Provision of lock onto target (Before and after launch)	To be mentioned		
	n. Fuze arming mechanism	To be mentioned		
	p. Boost with limited signature	Preferable		
	q. Launching sound	≤ 150 dB		
	r. Detection	Preferably immune to detection		
	s. Interference to command link	Preferably immune to interference		
	t. Waterproofness	Yes		
	u. Shelf life	10 years		
	v. Storage under normal temperature/humid condition (operation condition)	To be mentioned		
	w. Storage with special facility (controlled environment)	≥ 10 years		
	x. Safety falling height	To be mentioned		
	y. Shelf of the Fuze Battery	To be mentioned		
	z. Penetration Power (For both static & moving target)	Minimum 800 mm behind ERA		
	aa. Penetration against Rolled Homogeneous Armour (RHA), Spaced Armour, Composite Armour	To be mentioned		
18.	<b>Propulsion and Power Supply</b>			
	a. Type of boost and propulsion/ engine	To be mentioned		
	b. Provision of boost with limited signature	To be mentioned		
	c. Power supply system during operation	To be mentioned		
	d. Durability of power supply system	To be mentioned		
	e. Shelf life of power supply	To be mentioned		
19.	<b>Vision Device-Day</b>			
	a. Brand and model of Device	To be mentioned		
	b. Brand and model of detector (if applicable)	To be mentioned		
	c. Country of origin, manufacture and assembly of Device	Group B		
	d. Country of origin, manufacture and assembly of detector (if applicable)	Group B		
	e. Aiming distance (Identifying target up to effective range at day)	To be mentioned		
	f. Magnification of the Device	To be mentioned		
	g. Compatibility of Device-cooled or uncooled (if applicable)	To be mentioned		



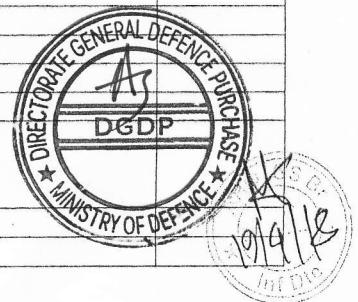
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Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	h. Field of view (Both horizontal & vertical)	To be mentioned		
	j. Power source including charging facilities	To be mentioned		
	k. Detector resolution (if applicable)	To be mentioned		
	l. Device resolution	To be mentioned		
	m. Capable of using in any terrain and weather condition without losing its effectiveness	To be mentioned		
	n. Operating temperature	- 20 ° C to + 50 ° C		
	p. Storage temperature	- 20 ° C to + 50 ° C		
	q. Operational humidity range	Minimum 95%		
	r. Weight (with and without battery)	To be mentioned		
	s. Shelf life	10 years		
	t. Continuous operation period (with one power source unit)	To be mentioned		
	u. Environment Issue	MIL STD 810 G		
	v. Provision of reticle illumination	To be mentioned		
20.	<b>Vision Device-Day/Night (Thermal Imaging)</b>			
	a. Brand and model of Device	To be mentioned		
	b. Brand and model of thermal detector	To be mentioned		
	c. Country of origin, manufacture and assembly of Device	Group B		
	d. Country of origin, manufacture and assembly of thermal detector	Group B		
	e. Aiming distance (Identifying target minimum up to effective range at night or at poor visible condition)	To be mentioned		
	f. Magnification of the Device	To be mentioned		
	g. Compatibility of Device-cooled or uncooled	To be mentioned		
	h. Field of view (Both horizontal & vertical)	To be mentioned		
	j. Power source including charging facilities	To be mentioned		
	k. Thermal detector resolution	To be mentioned		
	l. Device resolution	To be mentioned		
	m. Integrated thermal imaging or detachable	To be mentioned		
	n. Capable of using in any terrain and weather condition without losing its effectiveness	To be mentioned		
	p. Operating temperature	- 20 ° C to + 50 ° C		
	q. Storage temperature	- 20 ° C to + 50 ° C		
	r. Operational humidity range	Minimum 95%		
	s. Weight with and without battery	To be mentioned		
	t. Shelf life	10 years		
	u. Continuous operation period with one power source unit	To be mentioned		
	v. Environment Issue	MIL STD 810		
	w. Provision of reticle illumination	To be mentioned		
21.	<b>Shape and Dimension</b>			
	a. Weight of missile with container/ canister	To be mentioned		
	b. Weight of missile	To be mentioned		
	c. Weight of command and launch unit (CLU)	To be mentioned		

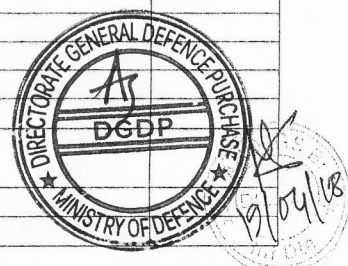




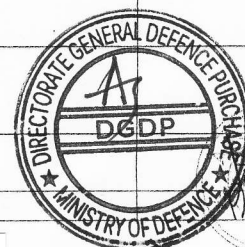
Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	d. Weight of tracker sight including associated power supply system	To be mentioned		
	e. Detail weight of any other major operating components	To be mentioned		
	f. Weight of full complement/ total system along with missile loaded	To be mentioned		
	g. Length of the missile inside container	To be mentioned		
	h. Diameter/caliber of the missile	To be mentioned		
	j. Height of the launcher (Ready to fire)	To be mentioned		
22.	<b>Other Important Features</b>			
	a. Back blast area/ Backward Ejection distance (If applicable)	To be mentioned		
	b. Laser safety classification as per IEC (International Electro technical Commission) 60825-1 Standard if laser used	To be mentioned		
	c. Destruction/ dangerous area (For Thermobaric Warhead)	To be mentioned		
	d. Transportation distance and method (Air, Road, Waterways) - In Packing Condition	To be mentioned		
	e. Time of continuous operation for whole system	To be mentioned		
23.	<b>Testing and Maintenance</b>			
	a. Type and Name	To be mentioned		
	b. Testing/Maintenance description	To be mentioned		
	c. Power source (AC/DC) (Details to be mentioned)	To be mentioned		
	d. Continuous working hours	To be mentioned		
	e. MTBF (Mean time before failure)	To be mentioned		
	f. BIT (Built In Test)	To be mentioned		
	g. Operating Crew	To be mentioned		
	h. Storage temperature	To be mentioned		
	j. Shelf life (Details to be mentioned)	To be mentioned		
	k. Any other features	To be mentioned		
24.	<b>Training Facilities</b>			
	<b>a. Indoor Simulator</b>			
	(1) Make and model	To be mentioned		
	(2) Operating temperature	To be mentioned		
	(3) Uninterrupted operation period	To be mentioned		
	(4) Storage life	To be mentioned		
	(5) Size and shape	To be mentioned		
	(6) Power source (AC/DC)	To be mentioned		
	(7) Readiness time	To be mentioned		
	(8) Any other features	To be mentioned		
	<b>b. Field/Outdoor Simulator</b>			
	(1) Make and model	To be mentioned		
	(2) Operating temperature	To be mentioned		
	(3) Uninterrupted operation period	To be mentioned		
	(4) Storage life	To be mentioned		
	(5) Size and shape	To be mentioned		



Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	(6) Power source (AC/DC)	To be mentioned		
	(7) Readiness time	To be mentioned		
	(8) Any other features	To be mentioned		
	c. Cutaway/ Sectionized Missile	Details to be mentioned		
	d. Mock-up Weapon System (Actual Size and Weight)	Details to be mentioned		
	e. Practice Missile	Details to be mentioned		
	f. Any Other Training Gadgets/ System	Details to be mentioned		
25.	<b>Vehicle details (If Vehicle mounted)</b>			
	a. Brand and model name vehicle	To be mentioned		
	b. Brand and model of engine	To be mentioned		
	c. Country of origin, manufacture and assembly of vehicle	Gp B		
	d. Country of origin, manufacture and assembly of vehicle	Gp B		
	e. Name and complete contact address of the manufacturer of vehicle	To be mentioned		
	f. Name and complete contact address of the manufacturer of engine	To be mentioned		
	g. Year of manufacturer	Not before the year of contract		
	<b>h. Air conditioning System (if available)</b>			
	(1) Model	To be mentioned		
	(2) Cooling	To be mentioned		
	(3) Heating	To be mentioned		
	(4) Capacity			
	i. Cooling.	To be mentioned		
	ii. Heating	To be mentioned		
	j. Number of Crews can accommodate	To be mentioned		
	k. Configuration	To be mentioned		
	l. Combat weight	To be mentioned		
	m. Ground clearance	To be mentioned		
	n. Protection	To be mentioned		
	p. Length	To be mentioned		
	q. Width	To be mentioned		
	r. Height (Inclusive Turret)	To be mentioned		
	s. Doors/Hatches (Details to be mentioned)	To be mentioned		
	<b>t. Hull Overhang</b>			
	(1) Front	To be mentioned		
	(2) Rear	To be mentioned		
	<b>u. Negotiable Obstacles</b>			
	(1) Gradient	To be mentioned		
	(2) Tilt/Slope	To be mentioned		
	(3) Angle of approach	To be mentioned		
	(4) Angle of departure	To be mentioned		
	(5) Height of wave	To be mentioned		
	(6) Trench crossing	To be mentioned		
	(7) Vertical obstacle crossing	To be mentioned		
	(8) Fording capability	To be mentioned		
	<b>v. Wheel Tread</b>			
	(1) Front	To be mentioned		
	(2) Rear	To be mentioned		
	w. Wheel base	To be mentioned		
	x. Fuel Endurance in High way	To be mentioned		
	y. Turning Radius	To be mentioned		
	z. Winch	To be mentioned		

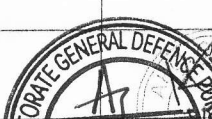


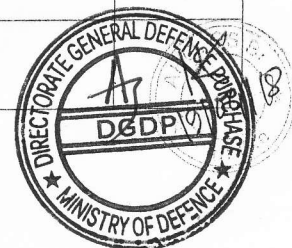
Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	aa. Fuel Tank Capacity	To be mentioned		
	bb. <u>Speed</u>			
	(1) Road	To be mentioned		
	(2) Cross Country	To be mentioned		
	(average)			
	(3) Afloat	To be mentioned		
	cc. <u>Engine</u>			
	(1) Maximum power output with RPM	To be mentioned		
	(2) Torque with RPM	To be mentioned		
	(3) Power to weight ratio	To be mentioned		
	(4) Number of cylinder	To be mentioned		
	(5) Cooling system	To be mentioned		
	(6) Displacement	To be mentioned		
	(7) Bore & Stroke	To be mentioned		
	(8) Type of Fuel	To be mentioned		
	(9) Fuel consumption	To be mentioned		
	(10) Fuel injection pump	To be mentioned		
	(11) Year of Manufacture	To be mentioned		
	dd. <u>Load on Axle</u>			
	(1) Front Axle	To be mentioned		
	(2) Rear Axle	To be mentioned		
	ee. Transmission	To be mentioned		
	ff. Propulsion System on Water	To be mentioned		
	gg. Transfer case (Details to be mentioned)	To be mentioned		
	hh. Steering	To be mentioned		
	jj. <u>Tyre</u>			
	(1) Combat run proof	To be mentioned		
	(2) Size	To be mentioned		
	(3) Brand / Type	To be mentioned		
	(4) County of origin and manufacturer	To be mentioned		
	(5) Number of Tyre including spare tyre.	To be mentioned		
	(6) Pattern	To be mentioned		
	(7) Suitable for cross country movement.	To be mentioned		
	(8) Central tyre air inflation system.	To be mentioned		
	kk. Suspension	To be mentioned		
	ll. <u>Brake</u>			
	(1) Service	To be mentioned		
	(2) Parking	To be mentioned		
	(3) Exhaust Brake	To be mentioned		
	mm. <u>Electrical System</u>			
	(1) Electrical power source (Voltage)	To be mentioned		
	(2) Battery (Quantity, voltage & AH)	To be mentioned		
	(3) Starter (Voltage & capacity in Kw)	To be mentioned		
	(4) Alternator (Quantity voltage & capacity in Ampere)	To be mentioned		
	(5) Auxiliary Power Unit (preferable)	To be mentioned		
	nn. Ground pressure	To be mentioned		





Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	pp. Weight of vehicle (without weapon system and missile)	To be mentioned		
	qq. Weight of vehicle (with weapon system and missile)	To be mentioned		
	rr. Ground clearance	To be mentioned		
	pp. <b>Fire Fighting equipment (if available)</b>			
	(1) Fire Fighting system	To be mentioned		
	(2) Method of actuation	To be mentioned		
26.	<b>Communication System (If available)</b>			
	a. Make and Model	To be mentioned		
	b. Country of Manufacture	To be mentioned		
	c. Type of Modulation	To be mentioned		
	d. Frequency Range	To be mentioned		
	e. Frequency Spacing	To be mentioned		
	f. Frequency Hopping	To be mentioned		
	g. Communication Range	To be mentioned		
	h. Supply Voltage	To be mentioned		
	j. Current Consumption	To be mentioned		
	k. Dimension	To be mentioned (WxDxH)		
	l. Compatibility of VHF Radio Sets used by Bangladesh Army(VHF WS Q-MAC, RF 1350 and XV 3088)	To be mentioned		
<b>Part-3 : TRAINING REQUIREMENT</b>				
27.	<b>Part-3A : User Training</b>			
	a. Various use of ATGW weapon system (Including all kind of simulators and vehicle)	To be provided (As per requirement of Infantry Directorate)		
	b. General care and fd maintenance of ATGW system (Including all kind of simulators and vehicle)			
	c. Storage related training			
28.	<b>Part-3B : OPERATION, REPAIR AND MAINTENANCE TRAINING</b>			
	Operation, repair and maintenance training of ATGW system (Including all kind of simulators and vehicle)	To be provided (As per requirement of EME Directorate)		
29.	<b>Part-3C : EQUIPMENT MANAGEMENT TRAINING</b>			
	Equipment management training of ATGW system (Including all kind of simulators and vehicle)	To be provided (As per requirement of Ordnance Directorate)		
<b>PART-4: REPAIR AND MAINTENANCE REQUIREMENT LESS LIST OF SPARES</b>				
30.	a. SST/measuring & testing /fault finding and diagnostic set	If available list to be provided (as per requirement of EME Directorate)		
	b. SSM	If available list to be provided (As per requirement of EME Directorate)		
	<b>c. Publications</b>			
	(1 Owners/operations manual in English (book type) including CD/DVD)	To be provided (As per requirement of EME Directorate)		
	(2) Workshop/repair manual in English (book type ) including CD/DVD)	To be provided (As per requirement of EME Directorate)		





Ser	Description	Specification	Offered Specification	Remarks
(a)	(b)	(c)	(d)	(e)
	(3) 100% Updated master spare parts catalogue in English (book type) including CD/DVD	To be provided (As per requirement of EME Directorate)		
	(4) Complete and updated master spare parts price catalogue/list in English (book type) including CD/DVD	To be provided (As per requirement of EME Directorate)		
<b>Part-5 : LIST OF SPARES</b>				
31.	List of spares	To be provided		
<b>Part-6 : TOOLS LIST FOR DIFFERENT LEVEL OF MAINTENANCE</b>				
32.	Tool list for different level of maintenance	To be provided		
<b>Part-7 : FINANCIAL SPECIFICATION</b>				
33.	Financial aspects	To be provided		

