

INVITATION OF VENDOR COMMENTS ON REVISED DRAFT QR/ TDs
OF MULTI GRENADE LAUNCHER (MGL) 40MM

1. It is intimated that firms/ vendors' comments are invited on the revised draft QR/ TDs of Multi Grenade Launcher (MGL) 40mm. All firms are requested to offer their comments on e-mail address scord@nsg.gov.in or gcproc@nsg.gov.in as per under mentioned format.

QRs	TDs	Comments by the firm
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2. You are requested to offer comments within 15 days from the date of uploading on the website alongwith OEM certificate and Make in India (MII) compliance certificate. The QR/ TDs of above mentioned equipment/ weapon are being considered by sub group committee meeting for finalization.

Dated : 16 Jun 2023

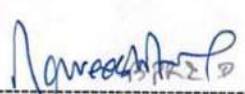



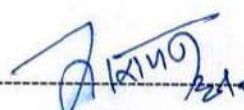
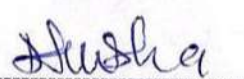
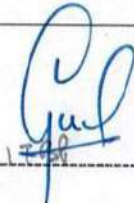

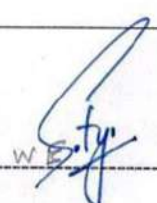

(Ankit Chaudhary)
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DRAFT QUALITATIVE REQUIREMENT (QR) AND TRIAL DIRECTIVES (TDs) OF MULTI GRENADE LAUNCHER (MGL)

Note: User based on requirement can opt for either Option -1 or Option-2

OPTION-1 : 40mm Multi Grenade Launcher (MGL) for Low Velocity (LV) Ammunition

S/N	Parameter	Specification	Trial Directive
1	Caliber	40 x 46mm (for low velocity amn).	OEM to provide certificate confirming the Caliber of the weapon. Certificate to be checked by the BOO.
2	Number of chambers	Not less than six	To be physically checked by the BOO.
3	Grooves	MGL should have grooves in barrel to achieve desired range and accuracy	To be physically checked by the BOO.
4	Accuracy at 75 meters	Grouping of 0.95m x 0.95m or smaller on a vertical target of steel plate with dimensions of 2000x2000x2mm	30 Grenades (inert/practice) to be fired with a mechanical mount and out of 30 Grenades, 27 Grenades to hit within a group size of 0.95x0.95 meters from a distance of 75 meters on a vertical target of steel plate with dimensions of 2000x2000x2mm. Firm to provide the Grenades for the test.
5.	Effective Range	MGL should achieve a range not less than 375 meters with low velocity amn.	To calculate the effective range, 10 Grenades to be fired and average of achieved range should be calculated. In-case of Blind/misfire additional grenades to be provided
6.	Type of Fire	Single shot and semi-automatic fire	To be physically checked by BOO.
7.	Rate of fire	Not less than 20 grenades per minute	To be physically checked by BOO by firing 6 grenades from fully loaded MGL and all 6 grenades should be fired in 18 seconds.
8.	Weight	Weight without ammunition and sight (Not more than 5.5 kg)	To be physically checked by the BOO.
9.	Length (stock closed)	Maximum 700mm	To be physically checked by the BOO.
10	Length (stock open)	Maximum 780mm	To be physically checked by the BOO.

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S/N	Parameter	Specification	Trial Directive
11.	Muzzle velocity	For Low velocity amn-76 \pm 3 m/s	OEM to provide certificate in this regard.
12.	Safety	Both Applied and mechanical safety should be available	To be physically checked by the BOO. Firm to provide OEM certificate for same.
13.	Sighting system	Red dot / Collimated Reflex sighting system	To be physically checked by the BOO.
14.	Operating temperature	-45(\pm 3°C) to +55(\pm 3°C) degree Celsius and RH upto 90%	OEM to provide a certificate to the effect from DGQA/ National / international accredited laboratory.
15.	Robustness	(a) To comply with TOP 03-2-045 A/IAW DEF STAN 00-35/DGQA certification for bulk production on safety parameters	OEM to provide a certificate to the effect from a national / international accredited laboratory. However the following tests will be carried out by the BOO :- (i) Drop Test (ii) Mud Test (iii) Water Immersion Test
		(b) MGL should have anti corrosive coating.	(b) OEM to provide certificate for the same.
16.	Gauging	Weapon to be checked for gauging on following parameters: - (a) GO (b) NO GO (c) FIRING PIN PROTRUSION (d) HEAD SPACE (e) FLASH GAP GAUGE	OEM to provide gauges during field trials and to be physically checked by BOO.

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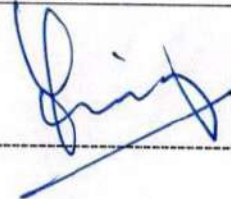
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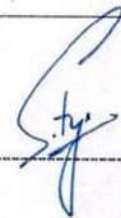
S/N	Parameter	Specification	Trial Directive
17.	Compatibility with ammunition	Standard Low Velocity 40 x 46mm lethal and non lethal ammunition	BOO to physically check the same with their ammunition
18.	Life of barrel	Not less than 5000 rounds.	OEM to provide a certificate to the effect from a national / international accredited laboratory.
19.	Maintenance and Operability	a) Field stripping and assembling of the system to be done without use of any special tool.	To be physically checked by BOO
		b) List of gauges to be provided by OEM at the time of tender (pre bid meeting). Thereafter user may specify the requirement of gauges with quantity.	(b) Stripping and assembling to be physically checked by BOO.
		c) List of all spare parts to be provided by OEM.	
20.	Training	(a) Firm to provide one week of user level trg at the locations specified by the user.	Firm to provide undertaking for the same.
		(b) Firm to provide one week of repair level training at the locations specified by the user.	Firm to provide undertaking for the same.
















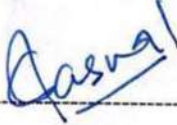
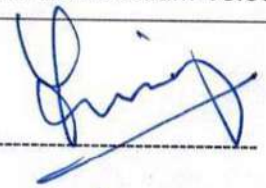











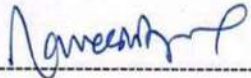

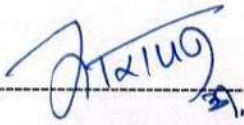
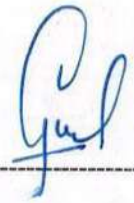



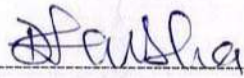


S/N	Parameter	Specification	Trial Directive
21	Misc	(a) Operator manual, trg manual, illustrated spare part list with diagram, tech brochure to be provided by firm.	Firm to provide undertaking for the same. Hard carrying case should be tested by a drop test. In this test, carrying case to be dropped from a height of 2 meter on a flat and hard surface, No cracks/deformation is acceptable.
		(b) Suitable Sling, Hard carrying case, Stripping tools, muzzle cover, Suitable cleaning kit to be provided.	

OPTION-2 : 40mm Multi Grenade Launcher (MGL) for Medium Velocity (MV) Ammunition

S/N	Parameter	Specification	Trial Directive
1	Caliber	40 x 51 mm(for medium velocity amn)	OEM to provide certificate confirming the Caliber of the weapon. Certificate to be checked by the BOO.
2	Number of chambers	Not less than six	To be physically checked by the BOO.
3.	Grooves	MGL should have grooves in barrel to achieve desired range and accuracy.	To be physically checked by the BOO.
4	Accuracy at 75 meters	Grouping of 0.95m x 0.95m or smaller on a vertical target of steel plate with dimensions of 2000x2000x2mm.	30 Grenades (inert/practice) to be fired with a mechanical mount and out of 30 Grenades, 27 Grenades to hit within a group size of 0.95x0.95 meters from a distance of 75 meters on a vertical target of steel plate with dimensions of 2000x2000x2mm. Firm to provide the Grenades for the test.
5	Effective Range	MGL should achieve a range not less than 800 meters with medium velocity	To calculate the effective range, 10 Grenades to be fired and average of achieved range should be calculated. In case of Blind/misfire additional grenades to be provided

S/N	Parameter	Specification	Trial Directive
6.	Type of Fire	Single shot and semi-automatic fire	To be physically checked by BOO.
7.	Rate of fire	Not less than 20 grenades per minute	To be physically checked by BOO by firing 6 grenades from fully loaded MGL and all 6 grenades should be fired in 18 seconds.
8.	Weight	Weight without ammunition and sight (Not more than 6 kg)	To be physically checked by the BOO.
9.	Length (stock closed)	Maximum 750 mm	To be physically checked by the BOO.
10.	Length (stock open)	Maximum 830 mm	To be physically checked by the BOO.
11.	Muzzle velocity	For Medium velocity amn-124 ± 3 m/s	OEM to provide certificate in this regard.
12.	Safety	Both Applied and mechanical safety should be available	To be physically checked by the BOO. Firm to provide OEM certificate for same.
13.	Sighting system	Collimated Reflex sighting system	To be physically checked by the BOO.
14.	Operating temperature	-45($\pm 3^{\circ}\text{C}$) to +55($\pm 3^{\circ}\text{C}$) degree Celsius and RH up-to 90%	OEM to provide a certificate to the effect from DGQA/ National / international accredited laboratory.
15.	Robustness	(a) To comply with TOP 03-2-045 A/IAW DEF STAN 00-35/DGQA	OEM to provide a certificate to the effect from a national / international accredited laboratory. However the following tests will be carried out by the BOO :-
		(b) MGL should have anti corrosive coating.	OEM to provide certificate for the same.

S/N	Parameter	Specification	Trial Directive
16.	Gauging	<p>Weapon to be checked for gauging on following parameters: -</p> <p>(a) GO</p> <p>(b) NO GO</p> <p>(c) FIRING PIN PROTRUSION</p> <p>(d) HEAD SPACE</p> <p>(e) FLASH GAP GAUGE</p>	OEM to provide gauges during field trials and to be physically checked by BOO.
17.	Compatibility with ammunition	Medium velocity 40x51mm lethal and non lethal ammunition.	BOO to physically check the same with their ammunition
18.	Life of barrel	Not less than 5000 rounds.	OEM to provide a certificate to the effect from a national / international accredited laboratory.
19.	Maintenance and Operability	a) Field stripping and assembling of the system to be done without use of any special tool.	To be physically checked by BOO
		b) List of gauges to be provided by OEM at the time of tender (pre bid meeting). Thereafter user may specify the requirement of gauges with quantity.	Stripping and assembling to be physically checked by BOO.
		c) List of all spare parts to be provided by OEM.	

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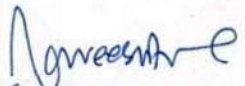
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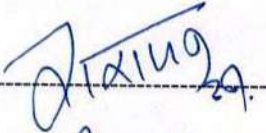
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S/N	Parameter	Specification	Trial Directive
20.	Training	Firm to provide one week of user level trg at the locations specified by the user.	Firm to provide undertaking for the same.
21	Misc	(a) Operator manual, trg manual, illustrated spare part list with diagram ,tech brochure to be provided by firm.	Firm to provide undertaking for the same. Hard carrying case should be tested by a drop test. In this test , carrying case to bedropped from a height of 2 meter on a flat and hard surface , No cracks/deformation is acceptable.
		(b) Suitable Sling, Hard carrying case, Stripping tools, muzzle cover, Suitable cleaning kit to be provided.	



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 PSO(W) BPRD



 Vinay Verma
 DC (CRF)



 A.N. Purohit, DC/AZA


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