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F.No. IV 17012/1/07-Proc. II / 600
Bharat Sarkar / Government of India
Grihas Mantralaya / Ministry of Home Affairs
PM Division / Prov. II

महानिरीक्षक (संभारण) / I.G. (Prov.)
आयरी सं./Diary No. 1399
दिनांक/Date 18/8/15

26, Man Singh Road, Jaisalmer House,
New Delhi. Dated 17.08.2015

To

DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

2IC (Prov)

Subject :- QRs and Trial Directives of 30mm Automatic Grenade Launcher (AGL).

The QRs and trial directives of 30mm AGL (as per annexure) have been accepted by the competent authority in MHA subject to condition that no deviation will be made from the proposed QRs and Trial Directives without the permission of MHA.

2. Henceforth, all the CAPFs should procure the above item strictly as per the laid down Technical Specifications/QRs subject.

3. CAPFs concerned will be liable for correctness of the QRs.

Encl: A/a

Yours Faithfully,

P.K. Srivastava
(P.K. Srivastava)

Under Secretary to the Govt. of India
Tele/Fax: 2338 1278

Copy forwarded for necessary action to:-

The Section Officer (IT), MHA: it is requested to host the QRs (soft copy attached) on the MHA website (under the page of Organizational set up- Police Modernization Division- QRs under A & A items)

R.K. Kumar
(Ritesh Kumar)
Section Officer (Prov. II)
Tel No: 2338 6034

Copy to :- DDG, (Procurement), MHA, Jaisalmer House

Dis (Prov)

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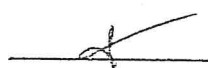
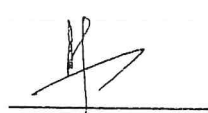
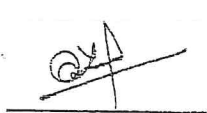


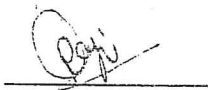

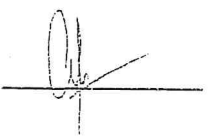
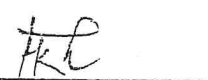
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REVISED QRS/SPECIFICATIONS OF 30MM AUTOMATIC
GRENADE LAUNCHER

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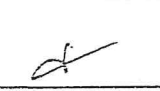
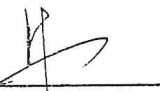

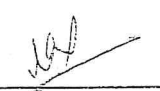

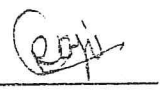

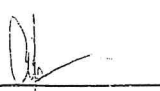
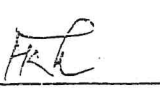
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<u>Ser No</u>	<u>Specification</u>	<u>Parameters</u>
1.	Operating/ Loading	The AGL should preferably be belt fed and operate on blow back action and be air cooled
2.	Calibre	30 mm
3.	Range	Effective range should not be less than 1700 meters by direct and indirect fire. Aimed fire with open sight should not be less than 800 meters and with telescopic sight 1000 meters. In indirect mode, it should be able to engage targets effectively at all ranges in low as well as high angle.
4.	Accuracy	The accuracy of the weapon should be comparable with that of the available weapons in the same class. The accuracy at max range should be $\Delta \leq 1/70$ and $B_0 \leq 15m$.
5.	Type of Fire	The weapon should fire in automatic mode and it should also fire single shots when fired in controlled burst.
6.	Barrel	Life of Barrel should be minimum 4000 Grenades.
7.	Rate of Fire	(a) Rapid - Not less than 70 rounds per minute. (b) Cyclic - 350 - 400 rounds per minute.
8.	Magazine box	The ammunition should be belt fed from a magazine box of 30 rounds.
9.	Traverse	The weapon should be able to traverse on its mount to cover at least 30 degree frontal arc. It should have the facility of free and controlled traverse.
10.	Elevation	Free as well as controlled elevation arrangements should be provided in its mounting. It should also have an depression/elevation from -5° to $+70^\circ$
11.	Design	The weapon should be so designed that it can be stripped without the need of any special tools.

REVISED QRS/SPECIFICATIONS OF 30MM AUTOMATIC GRENADE LAUNCHER (Contd ...)

<u>Ser No</u>	<u>Specification</u>	<u>Parameters</u>
12.	Sighting system	Launcher Sight - To be used for laying the launcher when firing at targets at various ranges in direct and indirect mode. It should accommodate the azimuth and elevation mechanism with optical system:- (a) Weight – not more than 1 Kg. (b) Weight with case – not more than 3 Kgs. (c) Magnification - Not less than 2.5 X. (d) Field of view - Not less than 13° (e) Filter – Should be provided with neutral and orange filters for bright and poor light conditions respectively. (f) Quick Release Handle - Should be provided with quick release handle for quick deflection of more than 6 degree. (g) Graticule sight should be provided to allow direct viewing and laying up to 700 metres in direct firing mode. (h) Measure of Unit - Should follow "degree/Mil"
<u>PHYSICAL CHARACTERISTICS</u>		
13.		The weapon should be compact, easy to carry, handle and operate and simple to maintain.
14.		The weapon should be compatible to use indigenously developed 30 mm VOG ammunition.
15.	<u>Weight</u>	(a) <u>Launcher with mount - Not more than 20 Kgs.</u> (b) <u>Magazine Box with 30 Grenades - Not more than 15 Kgs.</u> (c) <u>Magazine Box (Empty) -Not more than 3 Kgs.</u>

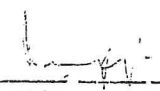
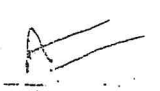


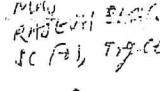
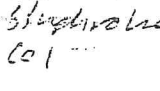
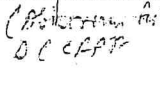
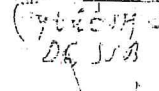

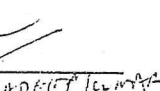
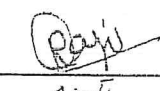
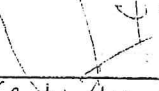
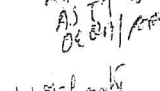
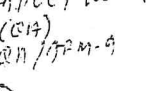
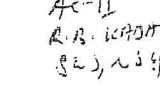
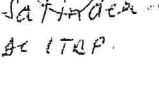
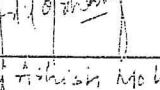
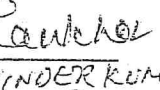


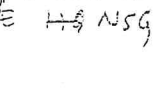
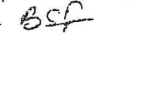


			
			
			

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REVISED QRS/SPECIFICATIONS OF 30MM AUTOMATIC
GRENADE LAUNCHER (Contd....)

Ser No	Specification	Parameters
16.	Length	The overall length of the weapon i.e, barrel and receiver group should not exceed 870 mm.
17.	Mountings	In addition to tripod available, mounting should also have the provision for vehicles and helicopter configurations. OPERATION AND MAINTENANCE
18.		The proposed weapon should be capable of Functioning satisfactorily under all operational conditions.
19.	Operational temperature	(a) Operating -45 ° to + 50 ° C. (b) Storage -45 ° to + 70 ° C.
20.		The AGL should be easy to maintain. The parts of the AGL should not corrode on exposure to 'rain and salt water'.
21.		The AGL should be easy to repair. Parts likely to be worn out/damaged/broken while in prolonged usage should be capable of being replaced easily under field conditions.
22.	Technical Documents	To be provided with each weapon in English, giving details of the weapon, functioning, operations, maintenance and its handling.

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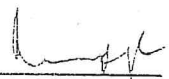
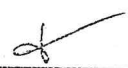



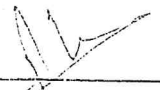
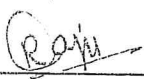




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DG, NSG

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TRIAL DIRECTIVES FOR 30MM AUTOMATIC GRENADE LAUNCHER

Ser No	Specification	Parameters	Trial Directives
1.	Operating/Loading	The AGL should preferably be belt fed and operate on blow back action and be air cooled	To be physically checked by the Board of Officers and a certificate regarding the principle of operation of the weapon to be provided by the OEM.
2.	Calibre	30 mm	The OEM must provide a certificate - about the calibre of the weapon.
3.	Range	Effective range should not be less than 1700 meters by direct and indirect fire. Aimed fire with open sight should not be less than 800 meters and with telescopic sight 1000 meters. In indirect mode, it should be able to engage targets effectively at all ranges in low as well as high angle.	The OEM must provide a certificate about the effective range of 1700 meters from a national / international accredited lab. However, the range test for direct/indirect fire with open sight and telescopic sight for 800m and 1700m respectively shall be carried out by the Board of Officers physically. Ranges of 800m and 1700m shall be marked by flags and after having zeroed the weapon with open sight and telescopic sight, 10 rounds (for each range) will be fired in an area of 100x40m for every range with fixed 10 full-height figure 11 targets (plywood figures connected crosswise). Range check will be complete if minimum 70% of targets are hit with fragments at 800m and minimum 50% of targets are hit at 1700m.
4.	Accuracy	The accuracy of the weapon should be comparable with that of the available weapons in the same class. The accuracy at max range should be $\bar{A} \leq 1/70$ and $\bar{A} \leq 15m$.	Accuracy test shall be carried out at maximum range of 1700m. 3-5 round bursts will be fired at this range and the accuracy should be within the specified range. (a) $\bar{A} \leq 1/70$ - represents mean deviation of burst points in range/X, [where $X = 1700 + X_{cp}$; X_{cp} = mean arithmetic coordinates of grenade bursts] $\leq 1/70$. (b) $\bar{A} \leq 15m$ - represents mean deviation of burst points in lateral direction $\leq 15m$.

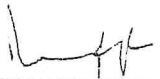
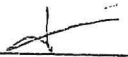


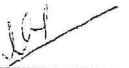
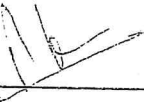


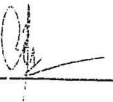

			
			
			

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TRIAL DIRECTIVES FOR 30MM AUTOMATIC GRENADE LAUNCHER (Contd...)

Ser No	Specification	Parameters	Trial Directives
12.	Sighting system	<p>Launcher Sight - To be used for laying the launcher when firing at targets at various ranges in direct and indirect mode. It should accommodate the azimuth and elevation mechanism with optical system:-</p> <ul style="list-style-type: none"> (a) Weight - not more than 1 Kg. (b) Weight with case - not more than 3 Kgs. (c) Magnification - Not less than 2.5 X. (d) Field of view - Not less than 13° (e) Filter - Should be provided with neutral and orange filters for bright and poor light conditions respectively. (f) Quick Release Handle - Should be provided with quick release handle for quick deflection of more than 6 degree. (g) Graticule sight should be provided to allow direct viewing and laying up to 700 meters in direct firing mode. (h) Measure of Unit - Should follow "degree/mil". 	<p>To be physically checked by BOO. The OEM must provide a certificate from a national/ international accredited lab in respect of magnification.</p>

TRIAL DIRECTIVES FOR 30MM AUTOMATIC GRENADE LAUNCHER (Contd...)

Ser No	Specification	Parameters	Trial Directives
		<u>PHYSICAL CHARACTERISTICS</u>	
13.		The weapon should be compact, easy to carry, handle and operate and simple to maintain.	To be physically checked by BOO.
14.		The weapon should be compatible to use indigenously developed 30 mm VOG ammunition.	To be physically checked by BOO.
15.	Weight	(a) Launcher with mount - Not more than 20 Kgs. (b) Magazine Box with 30 Grenades - Not more than 15 Kgs. (c) Magazine Box (Empty) -Not more than 3 Kgs.	To be physically checked by BOO.
16.	Length	The overall length of the weapon i.e, barrel and receiver group should not exceed 840 mm.	To be physically checked by BOO.
17.	Mountings	In addition to tripod available, mounting should also have the provision for vehicles and helicopter configurations.	To be physically checked by BOO.
		<u>OPERATION AND MAINTENANCE</u>	
18.	Operational temperature	(a) Operating -45° to $+50^{\circ}$ C. (b) Storage -45° to $+70^{\circ}$ C.	The OEM must provide a certificate from a national/ international accredited lab.

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TRIAL DIRECTIVES FOR 30MM AUTOMATIC GRENADE LAUNCHER (Contd...)

Ser No	Specification	Parameters	Trial Directives
19.		The AGL should be easy to maintain. The parts of the AGL should not corrode on exposure to 'rain and salt water'.	To be physically checked by BOO.
20.		The AGL should be easy to repair. Parts likely to be worn out/damaged/broken while in prolonged usage should be capable of being replaced easily under field conditions.	To be physically checked by BOO.
21.	Technical Documents	To be provided with each weapon in English, giving details of the weapon, functioning, operations, maintenance and its handling.	To be physically checked by BOO.

[Signature]
Maj RAJESH SINGH
JC (R), Try Centre

[Signature]
Amal Singh
Lt Col

[Signature]
(Abduram Khan)
DC, CRPF

[Signature]
(YOGESH SINGH)
DC, SSB

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Maj P. P. Singh
MSTT Dir
DEQA/ARM-9

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(P. P. Singh)
JG (CA)
DEQA/ARM-9

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AC-1
R.B. Kadim
SWS, 24

[Signature]
(Satinder Singh)
AC ITBP

[Signature]
Maj Ishikish Mohan Singh
TC WE HQ NSG

[Signature]
(Harjinder Kaur)
AC BSS

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DG, NSG

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