IV-21011/2/2009-Prov.I Bharat Sarkar/Government of India Griha Mantralaya/Ministry of Home Affairs PM Division/Prov. I Desk

26, Man Singh Road, Jaisalmer House New Delhi, Dated : 17 September, 2013

To,

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

Subject : QRs and Trial Directives for Sniper Rifles (Bolt Action) and Sniper Rifles (Semi- Automatic).

The QRs and Trial Directives in respect of **Sniper Rifles (Bolt Action) and Sniper Rifles (Semi- Automatic)** as per Annexure have been accepted by the Competent Authority in MHA

2. Henceforth, all the CAPFs should procure the above items required by them strictly as per the laid down Technical Specifications/QRs.

Encl: As above

Yours faithfully,

(C.P.S. Nonghulo) Director (Prov) Tel : 23386191

Copy forwarded for necessary action to :-

SO (IT), MHA : It is requested to host the QRs and Trial Directives (soft (i) copy attached) on the MHA website (under the page of Organisational Set up-Police Modernisation Division-Qualitative Requirements)

(Ritesh Kumar) Section Offcier (Prov.II)

Copy to : Director (Procurement), MHA. Copy for information to : PS to JS (PM)

QRs OF SNIPER RIFLES (BOLT ACTION)

Ser	Specifications	Parameters		
<u></u>				
1.	Caliber	7.62 x 51 mm.		
2.	Weight of the Bolt Action Sniper rifle	Should not exceed 10 Kgs including telescopic sight bipod/tripod		
3.	Life of Barrel	Minimum 10,000 rounds.		
4.	Shine and Colour of Furniture	Should be with good aesthetic look with matt finish without shine (Colour to be specified by user)		
5.	Capacit of Magazine			
	38	5 to 10 rounds depending on requirement of user (to be specified by the user)		
6.	Effective Range	Minimum 800 mtrs. To determine effective range the weapon should be able to penetrate 4.2 mm mild steel plate (hardness 120-150 BHN) at the range of 800 meters.		
7.	Accuracy	One minute of Angle (MOA) at 100 yards i.e. grouping fire of 5 rounds at 100 yards should not exceed one inch. For testing accuracy figure eleven target will be used & the weapon has to make a group at 100, 200, 300, 800 yards. at figure eleven target of one inch, two inch, three inch & eight inch respectively. The inner rectangle of the target will be point of aim.		
		Note :- Accuracy test will be conducted by the OEM ammunition.		
8.	Sights	In addition to a regular iron/open sight, a day sight should be provided with provision to remove it for fitting a suitable night sight. The Sniper Rifles to have a telescopic day sight with following configuration :- <u>Day Sight</u>		
		(a) Magnification – Not less than 8 X		
		(b) Suitable filters for degraded environmental conditions should be provided		
		(c) The sight should be able to withstand climatic and durability conditions as per IS 10236. The suitable filters should be submitted along with the samples		
9.	Sound suppressor	The weapon in addition to a telescopic sight should also have a suitable sound suppressor. The accuracy will be tested with the sound suppressor mounted on the rifle.		
10.	Operating/Storage Conditions	(a) Operating Temperature -40° C to $+55^{\circ}$ C (b) Storage Temperature -40° C to $+55^{\circ}$ C (c) Humidity -95% RH at 25° C		
11.	Safety	Both mechanical and applied safety		
12.	Trigger Guard	Should permit weapon firing using gloves.		
13.	Stripping and Assembling	Should be easy and in minimum parts. All cleaning parts to be designed for field cleaning without tools.		
14.	Ammunition	Should be capable of firing 7.62 x 51 mm ammunition.		
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15.	Should have adjustable cheek	pads, adjustable butt and comfortable pistol grip		
16.	Should have a detachable bipo	od/tripod.		
17.	Engineering Support Package	The manufacturer of the Sniper Rifle should provide		
		Engineering Support Package including :- ·		
		(a) Technical Literature in English.		
		(b) Training Manuals and User Hand Book		
		(c) Illustrated spares part list duly priced (for administrative purpose).		
	•	(d) Cleaning Kit		
		(e) List of STEs/SMIs/Test Jigs & fixtures for :-		
		i) Repair and testing of main equipment at field level.		
		ii) Repair and testing of PCBs modules of main		
· · ·		equipment and its accessories at base level.		
(f) MRLS (Manufacturers Recommended List of list of gauges.(g) List of spares for four years for field level and		(f) MRLS (Manufacturers Recommended List of Spares) and		
		repairs and spares backup must be assured for at least 15		
		years.		
	(h) Training aids-charts, slides, training brochu diagram, video films and CDs.			
18.	Tools/SMT/	To be provided with the weapon as per user requirement.		
	Gauges	To be provided with the weapon as per user requirement.		

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(Arvind Ranjan) Director General, NSG

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QRs OF SNIPER RIFLES (SEMI AUTO)

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Ger	Specifications	Parameters	
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1.	Caliber	7.62 x 51 mm.	
2.	Weight of the Bolt Action Sniper rifle	Should not exceed 10 Kgs including telescopic sight bipod/tripod	
3.	Life of Barrel	Minimum 10,000 rounds.	
4.	Shine and Colour of	Should be with good aesthetic look with matt finish without shine	
	Furniture	(Colour to be specified by user)	
5.	Capacity of Magazine	10/20 rounds (to be specified by the user).	
6.	Effective Range	Minimum 800 mtrs To determine effective range the weapon should be able to penetrate 4.2 mm mild steel plate (hardness 120-150 BHN) at the range of 800 meters.	
7.	Accuracy	One minute of Angle (MOA) at 100 yards i.e. grouping fire of 5 rounds , at 100 yards should not exceed one inch. For testing accuracy figure eleven target will be used & the weapon has to make a group at 100, 200, 300, 800 yards. at figure eleven target of one inch, two inch, three inch & eight inch respectively. The inner rectangle of the target will be point of aim.	
		Note :- Accuracy test will be conducted by the OEM ammunition.	
8.	Sights	In addition to a regular iron/open sight, a day sight should be provided with provision to remove it for fitting a suitable night sight. The Sniper Rifles to have a telescopic day sight with following configuration :- Day Sight	
		(a) Magnification – Not less than 8 X	
		(b) Suitable filters for degraded environmental conditions should be provided	
		(c) The sight should be able to withstand climatic and durability conditions as per IS 10236. The suitable filters should be submitted along with the samples	
9.	Sound suppressor	The weapon in addition to a telescopic sight should also have a suitable sound suppressor. The accuracy will be tested with the sound suppressor mounted on the rifle.	
10.	Operating/Storage Conditions	(a) Operating Temperature -40° C to $+55^{\circ}$ C (b) Storage Temperature -40° C to $+55^{\circ}$ C (c) Humidity -95% RH at 25° C	
11.	Safety	Both mechanical and applied safety	
12.	Trigger Guard	Should permit weapon firing using gloves.	
13.	Stripping and Assembling		
	Sarahang ana Assembning	Should be easy and in minimum parts. All cleaning parts to be designed for field cleaning without tools.	
14.	Ammunition	Should be capable of firing 7.62 x 51 mm ammunition.	

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Ser	Specifications	Parameters	
No			
15.	Should have adjustable cheek	pads, adjustable butt and comfortable pistol grip	
16.	Should have a detachable bipo	d/tripod.	
17.	Engineering Support Package	The manufacturer of the Sniper Rifle should provide	
		Engineering Support Package including :-	
		(a) Technical Literature in English.	
		(b) Training Manuals and User Hand Book	
		(c) Illustrated spares part list duly priced (for administrative	
		purpose).	
		(d) Cleaning Kit	
		(e) List of STEs/SMIs/Test Jigs & fixtures for :-	
		i) Repair and testing of main equipment at field level.	
		ii) Repair and testing of PCBs modules of main	
		equipment and its accessories at base level.	
		(f) MRLS (Manufacturers Recommended List of Spares) and	
		list of gauges.	
		(g) List of spares for four years for field level and base level	
		repairs and spares backup must be assured for at least 15	
		years.	
		(h) Training aids-charts, slides, training brochure blow up	
		diagram, video films and CDs.	
18.	Tools/SMT/	To be provided with the weapon as per user requirement.	
	Gauges		

Mai George Abraham SSO(W), BPR&



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(Arvind Ranjan) Director General, NSG

TRIAL DIRECTIVES FOR SNIPER RIFLES (SEMI AUTOMATIC & BOLT ACTION)

Introduction

1. The main purpose of Sniper Rifle is to destroy valuable targets at extended ranges with aimed fire, and with as few ammunition as possible.

2. Keeping the above in view, user trial directive is being formalized to enable evaluation of functional and operational capabilities of the weapon suited to precision fire.

Trial Requirements

3. <u>Duration of Trials</u>. Duration will be determined by the indentor depending upon the number of weapons to be evaluated.

4. <u>Number of Weapons</u>. One sample weapon should be provided by each vendor. Each weapon with three magazines and complete accessories should be submitted.

5. <u>Ammunition</u>. OEM to provide ammunition for carrying out accuracy test/effective range as per Para 6 and 7 of QRs.

6. **Gauges**. OEM to provide one set of gauges to check various parameters of QRs where applicable.

7. Aspects to be evaluated

<u>Ser</u> No	Specifications	Parameters	Methods
1.	Caliber	7.62 x 51 mm.	To be physically checked by BOO with gauges provided by the OEM.
2.	Weight of the Bolt Action Sniper rifle	Should not exceed 10 Kgs including telescopic sight bipod/tripod	To be physically checked by BOO.
3.	Life of Barrel	Minimum 10,000 rounds of firing.	OEM to provide a certificate confirming life of barrel as minimum 10,000 rounds.
4.	Shine and Colour of Furniture	Should be with good aesthetic look with matt finish without shine (Colour to be specified by user)	To be physically checked by BOO.
5.	Capacity of Magazine	5 to 10 rounds depending on requirement of user (to be specified in tender)	To be physically verified by the BOO.
6.	Effective Range	Minimum 800 mtrs.	Weapon should be able to penetrate 4.2 mm mild steel plate (hardness 120 -150 BHN) at the range of 800 mtrs.

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	Ser No	<u>Specifications</u>	Parameters	<u>Methods</u>
	7.	Accuracy	One minute of Angle (MOA) at 100 yards i.e. grouping fire of 5 rounds at 100 yards should not exceed one inch. For testing accuracy figure eleven target will be used & the weapon has to make a group at 100, 200, 300, 800 yards. at figure eleven target of one inch , two inch, three inch & eight inch respectively . The inner rectangle of the target will be point of aim.	For testing accuracy figure eleven target will be used & the weapon has to make a group at 100, 200, 300, 800 yards at figure eleven target of one inch, two inch, three inch & eight inch respectively. The inner rectangle of the target will be point of aim. All the bullets should be with in the three rectangles (of the standard figure eleven target). The accuracy test will be carried out during field functional trials, and the firing will be carried out by the firers of the OEM. The use of spotters will be permitted along with the rifle shooter. The OEM should also provide details of telescope that has been used by spotter. Note :- Accuracy test will be conducted by the OEM ammunition.
	8.	Sights	In addition to a regular iron/open sight, a day sight should be provided with provision to remove it for fitting a suitable night sight. The Sniper Rifles to have a telescopic day sight with following configuration :- Day Sight	To be physically checked by BOO
			(a) Magnification – Not less than 8 X	 (a) OEM to provide certificate from a national / internationally accreted lab. Certificate to be physically checked by BOO. (b) The BOO will also check the magnification of sights at SIW BSF, Tigri Camp, New Delhi.
			(b) Suitable filters for degraded environmental conditions should be provided	To be physically checked by BOO.
			(c) The sight should be able to withstand climatic and durability conditions as per IS 10236. The suitable filters should be submitted along with the samples	OEM to provide certificate from a national / internationally accreted lab. Certificate to be physically checked by BOO.
	9.	Sound suppressor	The weapon in addition to a telescopic sight should also have a suitable sound suppressor. The accuracy will be tested with the sound suppressor mounted on the rifle.	To be physically checked by BOO. The accuracy test method will be the same as mentioned at Para -7 above.

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Ser No	Specifications	Parameters	Methods
10.	Operating/Storage Conditions	(a) Operating Temperature -40° C to + 55° C (b) Storage Temperature -40° C to +55° C (c) Humidity - 95% RH at 25° C	OEM to provide certificate from a national / internationally accreted lab. Certificate to be physically checked by BOO.
11.	Safety	Both mechanical and applied safety	To be physically checked by BOO.
12.	Trigger Guard	Should permit weapon firing using gloves.	To be physically checked by BOO.
13.	Stripping and Assembling	Should be easy and in minimum parts. All cleaning parts to be designed for field cleaning without tools.	To be physically checked by BOO.
14.	Ammunition	Should be capable of firing 7.62 x 51 mm ammunition.	To be physically checked by BOO.
15.	Should have adjust comfortable pistol g	able cheek pads, adjustable butt and	To be physically checked by BOO.
16.	Should have a detac	hable bipod/tripod.	To be physically checked by BOO.
17.	Ruggedness Test	(a) Drop Test (b) Water Immersion Test	a) Drop Test – The weapon without telescope shall be dropped from a height of 1.5 meters on a hard ground / concrete road from butt end , right
		(c) Mud Test	hand side & left hand side. There should be no breakages and the weapon should be able to fire. (b) <u>Water Immersion Test</u> – Weapon
			along with telescope and other accessories mounted will be immersed in one meter deep water for thirty minutes with one round in the
			chamber. Weapon should be able to fire and there should be no water ingress in the telescopic sight.
			(c) <u>Mud Test</u> – The Weapon along with telescope, sound suppressor & loaded magazine will be smeared in Mud with the barrel plugged, in a mud hole and taken out. Weapon should be able to fire satisfactory.

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Ser	Specifications	Parameters	Methods
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18.	Engineering Support Package	The manufacturer of the Sniper Rifle should provide Engineering Support Package including :- (a) Technical Literature in English. (b) Training Manuals and User Hand Book	Items listed at Para -18(a),(b) & (d) of the QRs will be physically checked by the BOO.
		 (c) Illustrated spares part list duly priced (for administrative purpose). (d) Cleaning Kit (e) List of STEs/SMIs/Test Jigs & fixtures for :- 	For remaining items listed at Para 18 of the QRs, OEM will provide an undertaking that the stores/information will be provided at the time of supply of
		 i) Repair and testing of main equipment at field level. ii) Repair and testing of PCBs modules of main equipment and its accessories at base level. (f) MRLS (Manufacturers Recommended List 	stores.
		 of Spares) and list of gauges. (g) List of spares for four years for field level and base level repairs and spares backup must be assured for at least 15 years. (h) Training aids-charts, slides, training brochure blow up diagram, video films and CDs. 	
19.	Tools/SMT/ Gauges	To be provided with the weapon as per user requirement.	OEM will provide an undertaking that the items will be provided at the time of supply of stores.

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(Arvind Ranjan) Director General, NSG