No. IV-21011/1/2010-Prov-I Government of India Ministry of Home Affairs

26, Man Singh Road, Jaisalmer House, New Delhi, 18.1.2010

To

The DGs:Assam Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D

Subject: - QRs/Technical Specifications for the security related equipments -regarding

The QRs/Technical Specifications for the following security related equipments have been accepted and approved by the Competent Authority in MHA;-

- (i) Shot Gun/Spas Gun
- (ii) Armour Plates fir Snipers
- (iii) Laser Grip for Glock Pistols
- (iv) UBGL
- (v) Lay Tuning (Road Blocker)
- (vi) Slithering Rope
- (vii) Commander Torch
- (viii) Sonic Defenders-Hearing Protection Device
- (ix) Robot
- (x) Bullet Proff Jacket Full Body Protection(360 degree)
 (xi) Non Magnetic Tool Kit
- (xii)Gas Mask
- Henceforth, all the CPMFs should procure the above items required by them strictly as per the laid down Technical Specifications/QRs.
- The trial directives for the following items have also been approved by the Competent Authority in MHA
- (a) Mini Remotely operated vehicle-F/X
- (b) Electro Stun Gun
- (c) Light Support Weapon

(R.S.Sharma) Director (Prov)

Copy to:-

DD(Procurement),MHA

Copy for information to:-

PS to JS(PM),MHA

TRIAL DIRECTIVES FOR ELECTRO STUN GUN

Range Testing.

- (a) Effective range minimum 20ft. Deploy at targets and check for consistent accuracy by measuring the accuracy of the top probe to the point of aim.
- (b) Non lethal but capable of incapacitation. Human testing can be done in accordance to following points:-
- (i) Stun gun is fired from 12 feet on the human subject to see the spread of the probes
- (ii) Photos and measurement of the probes done to see the range of the probes after firing on the target.
 - (iii) Probes should not be contaminated, forensic lab test to be done on all the cartridge used in trials (Certificates to be obtained from the vendors from accreditated lab).
- (c) Should be hand held like a pistol. Hand held to test. Check for comfort and grip for various hands sizes.

Carriage.

- (a) Concealed carriage in the hip, shoulder, thigh and ankle positions, for which holsters will be provided by the manufacturer. Test with various holsters. The equipment must have smooth edges and no sharp protrusions in order to ensure comfort during prolonged carriage. Test the drawing and holstering of the devices multiple times.
- (b) Should be battery operated. The battery should have a life of one year/minimum 250 times firing capacity whichever is earlier. Activate unit for full one discharge every one minute.
- (c) Should be light and compact so that it can concealed.
- (d) Max wt 550 gms. Weigh a single fully operational unit with its cartridge in firing bay.

Fire and Accuracy

- (a) <u>Simple Operation</u>. Test for ease of use and review training materials.
- (b) Open dot type sighting system. Check for ease of taking aim using the open dot type sighting system.
- (c) Minimum range of 3 ft. Deploy fully loaded unit on target at 3 feet. Target must have material to absorb the probes.

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4. Effects of Fire.

- (a) <u>Duration of incapacitation should be minimum 15 Seconds</u>. Trigger button must be held down continually for 15 seconds and then released which will cease the effects of full incapacitation.
- (b) In case used in aircraft, it should not have an adverse effect on the avionics, Company to provide engineering study report/certification.
- (c) <u>Should effectively penetrate multi layer clothing</u>. Test on humans with clothing similar to local dress. Variation in incapacitating effect of the wave while it of the limb should also have a min incapacitating effect of 15 seconds. To accomplish test, the trigger button must be held down continually for 15 second and then released which will cease the effects. Test should include one probe to foot and one probe hip, one probe to back and one probe to buttock, one probe to forearm and one probe to hip.
- (d) Vendor should provide health certificate to the effect that the device does not cause permanent damage to the human body and does not cause interference/ impair the functioning of any implant. Vendor to provide list of the following:-
 - (i) Electrical specifications need to include output specifications and ranges.
 - (aa) Wave form.
 - (ab) Main phase charge.
 - (ac) Pulse duration.
 - (ad) Pulse rate.
 - (ae) Peak loaded voltage
 - (af) Temperature range.
 - (ag) Relative humidity.
 - (ii) Number of field use reports.
 - (aa) Minimum 1000.
 - (iii) Minimum 10,000 field human exposure data.
 - (iii) Human studies and certificates on the following:-





- (aa) Test catecholamine, lactate and pH evaluation in exhausted humans with prolonged ECD exposure.
- (ab) Acidosis evaluation.
- (ac) Acidosis evaluation during exertion.
- (ad) Multiple exposure testing in human volunteers.
- (ae) Physician review of more than 1,000 field uses.
- (af) Human stress response testing.
- (ag) Cardiac dysrhythmia.

5. <u>Training</u>.

- (a) <u>Provision of target for testing effect.</u> An electronic target would be preferable in this case. Full size training target is recommended using manufacturers special targets with metallic paper (To be provided by the vendors).
- (b) Availability of training carts. Vender to provide.
- (c) Recharging and zeroing of the equipment of ensure effective fire. Min 2 second to recharge the stun gun to fire. For testing, top probe should hit on the point aim to test the zeroing of the equipment.

Maintenance.

- (a) Contractual maintenance with adequate spares.
- (b) Vendor to agree to training of unit armourer on minor repairs.
- (c) Warranty period and fault liability. Vender to provide certificate.
- (d) Video samples of real incident field uses min 10.

(e) List of number of law enforcement agencies worldwide with a handheld stun guns in

Report Patel, 25 May 18 Mohanty

Approved/ Not approved

(N/P.S Aulakh) Director General, NSG