

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

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

3. 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 ✓

(18)1/10  
(R.S.Sharma)  
Director (Prov)

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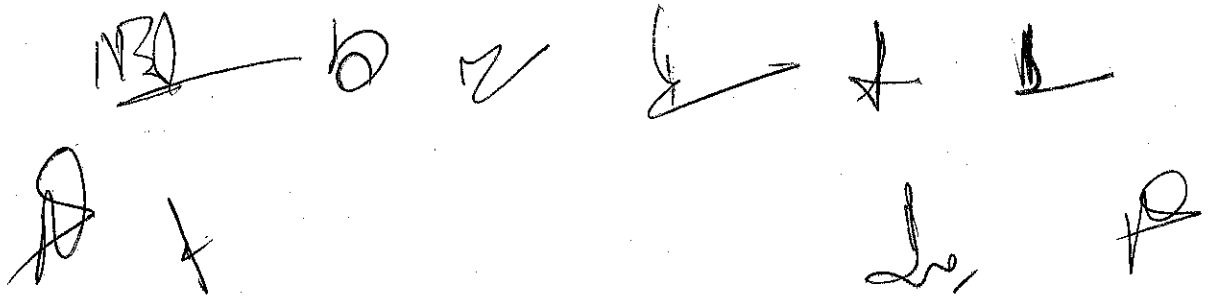
DD(Procurement),MHA

Copy for information to:-

PS to JS(PM),MHA

GAS MASK

1. **Weight.** It should be of light weight (less than 800 grams).
2. **Size and Shape.**
  - (a) The visor of face piece should be of panoramic design to give maximum peripheral vision and wearer recognition whilst greatly enhancing compatibility with weapon sights.
  - (b) Visor should provide wide field of vision (ideally between 90° to 120°).
  - (c) Visor should also have Vision Correction System mounted or attached inside to cater for the users who have got prescription lenses.
  - (d) The mask should be available in varying sizes to suit all kinds of users.
  - (e) The same and size of the mask should be such that it should not hinder the use of personal weapon and should be compatible with other tactical equipment used in field operations like communication devices, bulletproof helmets, etc.
  - (f) It should house an optional drinking port that allows for rapid fluid ingestion in contaminated environment.
  - (g) For enhanced communication the shape of mask should cater for an optional voice projection unit (VPU) with internal microphone which is connected via an electronic communication port (ECP) to which any kind of external communication systems can be attached.
3. **Configuration.**
  - (a) The mask should be made up of a material (Polyester/Lyera) which enhances the wearer comfort so that it can be worn for long periods.
  - (b) The mask should be Flame resistant and heat radiation resistant. It should not catch fire or melt when subjected to high temperatures (800°C for 5 sec/200°C for 6 minutes).
  - (c) The mask should be composed of high quality material (eg Halo Buty rubber) that provides maximum resistance to the know CBRN agents.
  - (d) Fogging of the face piece can be dangerous and threatens mission success hence the internal nose and mouthpiece should be made up of a material (silicone) that allow inhaled air to pass through the visor without causing condensation or misting. It should also reduce unused space inside the mask to prevent the buildup of carbon monoxide.
  - (e) The facepiece material should be rigid and strong (Polycarbonate) making the mask impact-resistant. It should be scratch and chemical resistant and strong enough to provide eye and full facial protection against violent impacts such as projectile fragments and grenade splinters (ideally it should resist the impact of a ¼ inch steel sphere traveling at a velocity of 450 M/sec).
  - (f) it should have a speech diaphragm to provide a clear communication.



**BLOWER**

4. Blower should have following specifications:-
- (a) It should be light weight (less than 600 grams).
  - (b) It should be powerful and efficient.
  - (c) it should not be very bulky (diameter less than 12 cm).
  - (d) The efficiency of filter should not degrade when the mask is exposed to high temperatures and flame.
  - (e) The housing material of the blower should be made of polyamide or equivalent.
  - (f) It should be decontaminable.
  - (g) The packaging material should be made of Polypropylene with a magnetic induction seal.
  - (h) The power source or the batteries used by the blower should last for more than 7 hours once fully charged.
  - (j) Batteries should be rechargeable so that quick replacement of discharged batteries can be done during the operation.
  - (k) The durability of the filter shell should be good (should last for more than 7 years when stored in original packaging).
  - (l) The Filter should manage the air flow well to minimize the heat build up inside the mask.
  - (m) The Filter should have a high Absorbent capacity so as to provide protection to the wearer's face, eyes and gastro-intestinal tract against chemical and biological agents in aerosol, liquid and vapor from including the following. Nerve Agents ("G" and "V" Series), Blister Agents (Mustard gas, lewisite etc). and Bilod Agents (Hydrogen Cyanide, Cyanogen Chloride and Chloropicrim).

**CYLINDER**

5. Cylinder should have following characteristics :
- (a) Cylinder should be fitted in a frame so that it can be carried on back by connecting it via port of mask.
  - (b) Should have one or two light weight cylinders option.
  - (c) The Cylinder should have a content monitoring device in it to enable the user to know the time elapsed after the cylinder is opened during any operation.
  - (d) Cylinder should be provided with locking and non locking configurations.
  - (e) Cylinder should provide breathing for more than 15 minutes as per the standard breathing rates of an individual (40 litres per minute)

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**Approved/ Not approved**

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

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