To

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

Subject: Finalization of QRs/Specifications for Weaponary /Security Equipments

The Sub-Group constituted by MHA vide Office Memorandum No IV.17017/18/2001-Proc.I dated 5-7-2002 for laying down QRs/specifications of various items/equipments has since submitted QRs in respect of the following items:-

(a) Abseiling Equipment
(b) Heliborne Equipment
(c) Deep Search Mine/Metal Detector
(d) Set Beam Search Light

2. These recommendations have been accepted by MHA. The QRs finalized by the Sub-Group and accepted by MHA in respect of the above equipment are enclosed herewith.

3. Henceforth, all the CPMPs should procure the above item required by them to meet their operational needs strictly as per the laid down QRs/specifications.

Yours faithfully,

(Alok Mukhopadhyay)
Under Secretary(Prov.I)

Copy-to: DD(Procurement), MHA
QUALITATIVE REQUIREMENTS: ABSEILING EQUIPMENT

1. Abseiling equipment should be assembled in a manner to facilitate commandos descend in a controlled manner.

2. The equipment shall comprise of the following:-
   (a) Full Body harness.
   (b) Descender with Quick Release Attachments.
   (c) Abseiling Rope.
   (d) Rope Bag.
   (e) Karabiners.
   (f) STIE Harness
   (g) Abseiling Gloves

3. **Full Body Harness**
   (a) Material - High-density Polyester Aramide.
   (b) Inner - lining of Cotton in black colour.
   (a) Hooks - Textile tape hook (Load bearing min 200 kg).
   (b) Weight of Harness - 1200 gm with tolerance 10%.
   (c) Fittings - Adjustable (buckle fittings).
   (d) Stitch - Double

4. **Descender with Quick Release Attachment**
   (a) Parts - Quick release mechanism.
   - D link.
   - Descender.
   (b) Weight and sturdy
   (c) Length - 380mm with tolerance of 50mm
   (a) Breaking strength - Min 200 Kg
   (e) Confirm to UI AA/CE safety.
5. **Rope Abseiling.**

(a) Material - High density Polyester Aramide.  
(b) Construction - Braided  
(c) Diameter - 10mm  
(d) Breaking load - 1000 Kg.  
(e) End Type - Textile loop end spliced steel.  
(f) Tenacity - 30 KN.  
(g) Elongation - Less than 5%  
(h) Shrinkage - Less than 3%  
(j) Relative mass of sheath - 35-40%  
(l) Sheath slippage - 3mm.  
(l) Knot Ability - 15mm  
(m) Length - Min 35m.  
(n) Weight of rope - 70 gm/mtr.

6. **Rope Bag.**

(a) Made of Nylon, black in colour.  
(b) PU coated.  
(c) A draw strip/cord of nylon on top to tie the bag. Straps to wear on the thigh.  
(d) Large enough to hold 35m rope.  
(e) Design to allow easy stowage and kink free deployment of abseil rope.

7. **Heavy duty Carabiner (Large).**

(a) Standard - As per UIAA/CE Safety standard.  
(b) Weight of Carabiner - Less than 100gm.  
(c) Rope bearing Surface - More than 10mm  
(d) **Breaking Strength.**  
   (i) Gate Closed - Min 25 KN.  
   (ii) Gate Open - Min 9 KN.  
   (iii) Minor Axis - Min 10 KN.  
(e) Safety - Should be a twist lock/screw.
8. **STIE Harness**

(a) Material - High-density polyester aramid.
(b) Inner - Cotton black.
(c) Hooks - Textile tape hook.
(d) Weight of STIE Harness - 1200gm with tolerance of 10%gm.
(e) Fittings - Adjustable.
(f) Stitch - Double
(g) Attachment - Front as well as back ride.
(h) Breaking Strength - 500kgs.

9. **Abseiling Gloves**

(a) Material - One fingered made of water resistant leather with Thumb & Palm reinforced.
(b) Colour - Black.
(c) Type - Single hand type.

10. The complete equipment should be able to sustain temperature variations from -20°C to +50°C.
11. **Composition of Abseiling Equipment Set**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Items</th>
<th>Qty reqd in a set</th>
<th>Total qty reqd for 300 sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Full Body Harness</td>
<td>01</td>
<td>300</td>
</tr>
<tr>
<td>2.</td>
<td>Karabiners</td>
<td>02</td>
<td>600</td>
</tr>
<tr>
<td>3.</td>
<td>Abseiling gloves</td>
<td>02</td>
<td>600</td>
</tr>
<tr>
<td>4.</td>
<td>Descender with quick release</td>
<td>01</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>attachments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>STIE Harness</td>
<td>01</td>
<td>300</td>
</tr>
</tbody>
</table>

**Pooled Stores.**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Items</th>
<th>Qty reqd in a set</th>
<th>Total qty reqd for 300 sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Abseiling Rope</td>
<td>01 for every 05 sets</td>
<td>60</td>
</tr>
<tr>
<td>2.</td>
<td>Rope Bag</td>
<td>01 for every 05 sets</td>
<td>60</td>
</tr>
</tbody>
</table>

12. **Trial of ABSEILING EQPT.** The firm shall provide one set of Abseiling Eqpt for field trial at no cost and no commitment basis, to ascertain the user satisfaction.