

AoN Details For AoNs Accorded
by SPB/DPB/DAC

AoN Date : **02 Nov 2022**

ITEM DESCRIPTION (weapon/equipment/platform) : **Ballistic Helmet**

QUANTITY : **Quantity 15,000 Ballistic Helmet**

CATEGORIZATION : **'Buy (Indian-IDDM)' through FTP.**

BROAD PARAMETERS QRs OF THE ITEM : **As per OR attached.**

SPECIAL INSTRUCTIONS ON DEMO, IF ANY : **No Cost No Commitment (NCNC)**
Demo cum evaluation will be
conducted at TBRL/NFSU.

ANY OTHER SPECIFIC INSTRUCTIONS : **NA**

OPERATIONAL REQUIREMENTS : BALLISTIC HELMETS

General.

1. There is a need to equip IA with Ballistic Helmets capable to protect soldiers from high speed rifle bullets. This equipment will be used by troops during training and operations. The proposed Ballistic Helmet will replace in-service Fibre Glass Helmet.

Operational Parameters

2. **Ballistic Resistance.** Provide equal protection throughout the covered area of the helmet against 9x19 mm FMJ/Pb bullets at 430 ± 15 m/s from 5 m.

3. **Enhanced Protection Modular Attachment.** Be provided with suitable modular attachments to enhance abovementioned protection levels of Ballistic Helmet to protect against 7.62x39 mm Hard Steel Core bullets at 700 ± 15 m/s from 10m. Be modularly attached over the shell of Ballistic Helmet to cover front, sides and back of the BH. Be rugged to sustain protection levels under operational conditions.

4. **Trauma Level (Back Face Signature).**

(a) Not more than 13 mm for minimum five randomly fired shots of bullets specified at Para 2 of this document.

(b) Not more than 15 mm for minimum four randomly fired shots of bullets specified at Para 3 of this document.

5. **Operating Temperature.** Be able to operate between minus 20°C to 45°C.

6. **Design.** As per Advanced Combat Helmet design. Coverage Area of a medium size helmet shell (inner) will be minimum 1100 sq cm. Coverage Area of the modular appliques/ attachment will be minimum 600 sq cm. It should be bolt-free design. It should facilitate unhindered use of handset of communication radio, in-service Night vision devices, personal spectacles and respirators/ chemical hoods.

7. **Size and Weight.** The size (to fit the head sizes given below) and weight of complete helmet with modular attachment (enhanced protection) & accessories be as under:-

(a) **Small size.** - 48 to 52 cms (Weight - Maximum 2.1 Kg).

(b) **Medium size.** - 52 to 57 cms (Weight - Maximum 2.2 Kg).

(c) **Large size.** - 57 to 62 cms (Weight - Maximum 2.3 Kg).

8. **Ergonomics.** Be comfortable to wear continuously for prolonged hours in varied operating environments. Design should not hinder aiming during use of personal/ crew served weapons. Inner padding to enable air circulation to mitigate heat retention.

9. **Harness.** The harness should be provided with adjustable straps/ fasteners with multipoint support, comfortable chin cup, internal layer, hook disks and a complete pad set. The harness retention system must ensure NO WOBBLE of the Helmet during continued usage by providing 360° grip around the head. Quick release mechanism to ensure ease of wearing, adjusting and removal of helmet even while wearing ECC gloves.

10. **Surface & Interiors.** Shell of Ballistic Helmets must have a matt finish. The padded interiors must be easily removable and easy to wash and dry. Material of pads & harness must be anti-bacterial & anti-fungal in nature. Material of pad covers and harness straps be of wicking nature and retard any kind of smell.

11. **Reversible Cloth Cover.** A reversible cloth cover must be provided to cover shell, including the modular attachments for enhanced protection, of the helmet. The pattern should be Indian Army Combat Uniform Digital pattern with Desert Tan shade on reverse. The fabric must be flame retardant and water resistant. Patches of hook and loop fasteners be provided on the cover to enable attachment of accessories as desired.
12. **Carry Bag.** A carry bag with a zipper be provided to enclose the helmet during transportation. Be in same colour shade as helmet shell, be light weight and cushioned to ensure damage free handling during transportation. The fabric of carry bag must be water proof.
13. **Accessories.** Shroud and tactical side rails be provided to facilitate attachment of various accessories.
 - (a) **Shroud.** Be fitted on front side of Helmet bolt-lessly and allow accommodating the interface of Night Vision devices.
 - (b) **Tactical Side Rails.** Be provided on both sides of the Helmet to accommodate IR torch & Visor with appropriate mounting. Must conform to MIL STD 1913.
14. **Colour.** The complete Ballistic Helmet should be olive green in colour {PANTONE Number 18-0420 TPG (Four Leaf Clovers)}. Harness and accessories such as tactical side rail and shroud must be in same colour as the shell or in Black colour.
15. **Service Life.** Minimum eight years for Ballistic Helmet Shell with Enhanced Protection Attachments. Minimum two years for all other components.
16. **Size Markings.** The size and manufacturer details to be marked by engraving/ laser etching on the inner side of the helmet and should not wear off with rough use.