

INVITATION OF EXPRESSION OF INTEREST FOR
MOUNTAINEERING EQUIPMENT

NDRF is the lead federal Force in India responsible for responding to all types of natural and man-made disasters. As part of its mandate, NDRF is equipped and authorized to handle mountain rescue operations.

2. NDRF now intends to procure mountaineering equipment for each of its 16 Units/Academy. Accordingly, NDRF has prepared a draft technical specifications for 49 Nos of mountaineering equipment required to handle mountain rescue operations. The draft specifications are appended as **Appendix- A**.

3. In this context, NDRF invites Expressions of Interest (Eoi) from eligible manufacturers, suppliers and vendors to submit their comments and suggestions. In case these specifications do not match with the available equipment in the market, the same may be highlighted and the specification of the equipment available in the market may kindly be provided with the same functionality. The purpose of the EOI document is to provide necessary information to NDRF so that genuine and generalized specifications can be framed and finalized for further procurement, and no gap exists in the specifications of the items available in the market out the specifications floated in the bid by NDRF.

4. This EOI is not an offer by NDRF or a tender document but it is an invitation to receive responses from eligible manufacturers, suppliers and vendors in the industry the draft specification framed by NDRF.

5. **Eligibility Criteria:** The minimum eligibility criteria for an entity to participate in the EOI are as follows:

- i. The entity must be a manufacturer or vendor/supplier/dealer registered in India under relevant applicable Acts and Laws.
- ii. The entity must have some experience in the supply of such equipment.
- iii. NDRF may call manufacturers, suppliers and vendors to conduct the demonstration/field trial of such equipment if needed before finalizing the specification.


6. **Documents to be submitted:** The following documents are required to be submitted as part of the response to this EOI

- i. Documents supporting Eligibility Criteria as mentioned above.
- ii. List of equipment/catalog with detailed technical specifications along with estimated cost if possible.

7. Eligible manufacturers, suppliers and vendors who have the competence and experience to carry out such work are requested to submit the EOI along with supporting documents to reach by 20/07/2023. No hard copy of the documents is required to be submitted.

Important timelines:

Event	Timeline
Last date of submission of responses	<u>20</u> /07/2023


(Bharat Bhushan Vaid)
Dy. Inspector General (Prov.),
HQ NDRF, New Delhi

Mountaineering Equipment Specifications

Sno	Name of Equipment	Specifications suggested
1	Socks Woollen	Max Temperature: 0° C Min Temperature: -25° C (Certified so by the OEM) Main Fibers: Thermolite, Fiber Lycra or equivalent Composition: 60%- 70% Polyester Thermolite, 15%-25% Polyamide, 5%-15 Fiber Lycra or equivalent fabric Technology: Toe and heel reinforcements For the activities of: Trekking, mountaineering Weight: 120 - 140 gm/ pair
2	Socks Liners	Max Temp- -5° C Min Temp- -25° C (Certified so by the OEM) Main Fibres- Lycra fiber, thermolite Composition- 7%- 12% Polymide 12%-18 % Fiber Lycra 70%-80% Polyester Thermolite Technology- Toe and Heel Reinforcement
3	Sleeping Bag (High Altitude)	Weight:(Regular) 1650g-1725gm, (Long) 1725gm-1825gm Temperature rating : -40°C (Certified so by the OEM) 30Dinier - 35 Dinier Pertex Quantum (50-60 gsm) or equivalent with fluorocarbon-free durable water repellent. Lining: 25-30 Dinier Nylon (35-40gsm). Min 650 Fill Power Duck Down with water resistant fabric. Top fabric -50-60 GSM Outer Cover included(water proof material)
4	Liner for Sleeping Bag	Material-Polyster or Cotton (Poly-cotton (95% cotton/5% polyester) Weight-300-450gms Size- M,L,XL Stuff sack Mummy shape,Lightweight and packable Dimensions Approx : 92cm x 185cm(±5%)
5	Crampons	1.Two toothed, vertical front points 2.12-point crampons for better bite and comfort when walking 3. Binding system is designed to fit boots with heel welts 4.Bi-position linking bars, for a large range of boot sizes (from 36 to 50) 5.Tool-free length adjustment 6. Steel crampons for maximum durability 7. ANTI BOTT system or equivalent 8. Front sections, linking bars, antibott system, and bindings can be replaced separately 9. Compatible with the front sections to convert them into classic mountaineering or ski touring crampons . Boot sizes: 36-50 Certification(s): CE or EN or UIAA.
6	ICE Screw	Material(s): chromoly steel or aluminium Certification(s): CE or UIAA or EN Length & wt - 13 cm-80-90- gm, 16 cm- 90-100gm, 19cm-100-110gm, 22cm-110-120gm
7	Snow Stake	Weight: 250-300gm Length: 64-144cm / 26"- 57" Material: Aluminium alloy Angle size: 45-50X45-50mm With Webbing cover Construction with holes

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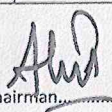


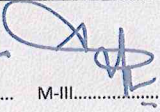
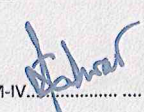
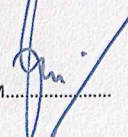

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8	Chock Nuts (set of 9)	Manufactured from aluminium alloy, and wire cable of steel with Zinc plating Min strength 6 KN, EN12270 or UIAA certified Lengths of wire cable from 18mm to 50mm, weight as per size
9	Friends/spring loaded Climbing device (set of 10)	10 Sizes One stem cam Extendable dyneema colour-coded slings Large loops for easy manipulation . Material- Aluminium Alloy Size- 16mm-165mm Wt- 70-1000 gm as per size EN or CE or UIAA certified
10	Tent - 3 men (High Altitude)	Tent Type: Geodesic design Pitching Type: Outer first preferably Suitable for at least 7000meters Number of Persons: 3/ 4 Number of Seasons: 4 Number of Poles: min 4 Number of Doors: 2 Floor Size: 215-220X 20 x 215-220 cm, min 4.5 Sq meters Floor Size with Rainfly: min 7 Sq meters Peak Height: 125 cm- 135 cm Poles' Materials: Aluminium poles Body Fabric: 20D Ripstop breathable Nylon with DWR finish Floor Fabric: 50D Diamond Ripstop PU coated Polyester with 5,000 mm Hydrostatic Head waterproofing Rainfly Fabric: 40D Ripstop SilNylon Vestibule: 2 plus Vestibule Space: min 2 Sq meters Packed Weight: 4-5 kgs Packed Tent Dimensions: 22" x 30" (± 10 %) EN or CE UIAA certified Certifications-
11	Trekking shoes	Mid-cut ankle high, light weight and robust with comfortable fit Waterproof , with breathable fabric Lining: Comfort & insulated Indicative Weight: max 1900g / pair (9 UK) Sole: Vibram or comparable sole
12	Cap Balaclava	Warm, light-weight stretch fleece balaclava, designed for all-round cold weather use. Weight: 65-75 gm(large size) Available in small/XL size also Three piece construction Low bulk soft Lycra binding Low bulk seams for increased comfort Sustainable upto- min- -40°C
13	Carry Mattress	Carry Mat is also known as Ground Mat or Rest Pad Lightweight and Water-resistant. Material: EVA Foam Sheet, Thickness- min 10 mm, Weight: 400 – 500gm Pack Size: 24" – 29" X 8" x 8" (it should be outer packing bag of nylon) Length & Width- 72 inches. min and 24 inches
14	Warm jacket (High Altitude)	Front and rear hood adjustment Waterproof/resistant , breathable outer fabric Insulated lining Stitch-through construction 2-way YKK VISLON (or equivalent) front zip with synthetic insulated baffle behind 2 YKK (or equivalent) coil zipped hand pockets Internal zipped security pocket 800Fill Power R.D.S Certified Goose Down Weight: max 650gms (large size)

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		UPPER - Size-S/M/L/XL Front and rear hood adjustment in upper YKK zipped (or equivalent) front opening with storm guard YKK zipped (or equivalent) pockets with storm guard YKK pit zips (or equivalent) with storm guard Brushed tricot chin guard Fully adjustable drawcord hem Velcro adjustable cuffs Jacket stuffs into hand pocket Main fabric - 50D polyester / 95-105gsm LOWER - Size-S/M/L/XL Main fabric - 50D polyester / 95-105gsm Should have elastic band at the waist (along with drawstring) and ankle
15	Wind proof suit	
16	Rucksack 70-80 LTR / 35-40 LTRS	Adjustable back Carrying System Snow guard with two drawstrings under the lid Removable section between main and bottom compartment Load control straps Height-adjustable chest belt Handle on front and back Strong No.10 zipper Lockable zipper slider 3D zipped front opening Height-adjustable lid with gear loops Lid compartment with key holder Rain cover Hydration system compatible Base made from durable 600- 700 Dinier Cordura polyester Bottom drawn high at the sides with all-round compression straps Side pockets made of an elastic material Material loops on the front with an integrated hiking stick/ice axe holder First Aid Compartment (Contents not included) Large zipped front pocket. Weight-70-80 ltrs- 2.3-2.8kgs 35-40 ltrs- 1.5-1.8 kgs
17	Carabiner Screw	Vertical [Kn]: 24(±5%) Open [Kn]: 95 (±5%) Minor axis [Kn]: 8(±5%) Width [mm]: 76 (±5%) Length [mm]: 120(±5%) Gate open [mm]: 22(±5%) Certification: EN or CE or UIAA Closure: Screw Weight: 80-85g Material: aluminum
18	Carabiner Plain	Weight 45-50 g Major axis strength 23 kN (±5%) Minor axis strength 8 kN (±5%) Open gate strength 9 kN(±5%) Gate opening 24mm to 27 mm Material: aluminum Certification(s): CE or EN or UIAA
19	Descender	Vertical strength : 30 Kn (±5%) Width: 76 mm (±5%) Length: 130 mm(±5%) Approved rope diameter: 8 - 12mm Weight: 100 -120 gms Material: Aluminium Certification: EN or CE or UIAA

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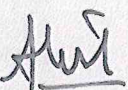
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		1 Material(s): ABS shell, expanded polypropylene (EPP) liner, expanded polystyrene (EPS) liner, polyester webbing - Hard outer shell - impact- and scratch-resistant
20	Helmet	- Hybrid construction with thick ABS shell, EPP foam liner(entire inner shell) - Flexible headband conforming to the shape of the head 2 Designed for optimal protection against side, front, and rear impacts: - Lower in the rear, the design provides greater coverage for enhanced protection 3 Suitable for climbing, mountaineering 4. clips for headlamp attachment 5 Certification(s): CE or EN or UIAA 6. Weight- 250-350 gms
21	Single Pulley	Lightweight, compact pulley Fixed side plates allowing quick installation and coupling with a rope clamp Sheave mounted on self-lubricating bushings for efficiency Specifications: Rope Diameter -8-12 mm Material(s): aluminum side plates, aluminum sheave Certification(s): CE or EN or UIAA .
22	Seat Harness	Material(s): Polyester webbing, closed-cell foam Certification(s): CE or EN or UIAA 1 Versatile and easy to use: - fully adjustable--one size fit all - Waistbelt equipped with two DOUBLEBACK buckles to easily adjust and center the harness, keeping the gear loops in a position that is easily accessible - Adjustable leg loops 2 Ready to carry and organize gear- Should be equipped with 4 gear loops 3 Comfortable:Technology constrution allows weight distribution along the the waistbelt and the leg loops
23	Headlamp	Light Output: 700-900/ 100-200 lumens (ANSI FL 1 STANDARD) Weight: 100- 130gms Technology: LeD STANDARD LIGHTING Beam pattern: Flood & Spot Energy: 2250 -2500 mAh Lithium-Ion rechargeable battery (included) Charging Time: 6-7 hrs Power by AA batteries Adjustable inclination of headlamp Beam distance - 50 to 100 mtr.(150 Lumens) 75 to 150 mtr (700 Lumens) Certification: min. IPX4 (weather-resistant)
24	Snow Goggles	Axis Strap (a pivoting joint that allows for better helmet compatibility) Anatomic frame. Anti-fog coating. silicone strap. Symmetrical adjustment (2 loops on either side of the strap can be adjusted) Dual soft foam. Minimalist Frame., suitable protective casing Spherical lens. UV Protection 100 percent . Certification: EN or CE
25	Sun glasses	Color-Multicolour Frame Material - Plastic, suitable protective casing Shape - Wrapped Lens Material - Polycarbonate Lens Type - Polarized Material Type - Plastic UV Protection - UV400



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		Wide Mouth min. 4.0 (cm) Slim & Light Non Stick Coating with food grade stainless steel, BPA & BPS free and non-toxic
26	Thermos Flask	Easy to dismantle cap for cleaning Capacity-1 L Weight-Gross(Kgs)-500-650 gms Hot-87 degree Celcius 1hr/71 degree celcius 6hr ($\pm 10\%$)
27	Water Bottle	BPA/BPS free and non-toxic plastic bottle designed for easier handling, also slides into car cup holders or a backpack side pockets Lid loop Stopper snaps onto its attachment on lid to stay out of the way while drinking Universal thread fits most water purifiers and filters Large mouth opening is easy to fill and clean Weight : 175-200 g Volume : 1 Ltrs
28	Tent - 3 men	Footprint available Repair set Door Storage Pockets Different door opening options Zipper with anti-catch flap Nylon hooks for fixing the fly even in cold conditions Extendable and replaceable anchor points Cord locks Extended guy line webbing Vestibule extension solution 100% Self supporting construction Seasons- 3 Poles- Aluminium, 3 nos Dimension- 215-220X 215-220 cm Weight- 4.5 kgs max
29	Rock pitons (set of 10 of vario	Material(s): steel or chromoly Certification(s): CE, UIAA or EN Type P,S Length 5 cm TO 11 cm Weight 95-110 gm(per piece)
30	Ice Axe	Material(s): Steel, aluminum, nylon, hole for carabiners Certification(s): CE or UIAA or EN Length-70-75 cms Version Adze Weight 450-525 g. Construction; Straight shaft/bent shaft
31	Shovel Multi-purpose	Can be used for digging, chopping, scooping, hammering, and scraping surfaces Rugged, space-saving folding shovel fits easily in a backpack; Saw Length (with handle)-12.5" ($\pm 10\%$) Saw Blade Length - 5.5" (14 cm) ($\pm 10\%$) Shovel Length (with handle) 23.25" (59 cm) ($\pm 10\%$) Style - Folding Weight 450-525 Grams approx Material - Metal/Aluminium
32	Chest Harness	Two DOUBLEBACK adjustment buckles Rear cross-over allows webbing straps to be correctly positioned Adaptable height tie-in point: reversible design allows buckles to be positioned on the shoulders or under the arms Material(s): Polyester webbing Weight 275- 350 gm. Certification : EN or CE or UIAA

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		Wide, flexible webbing Fully adjustable shoulder straps and leg loops for precise fit Two flexible equipment loop
33	Combined Harness	Adjustable leg loops 4-buckle construction . Certification : EN or CE or UIAA
34	Hand Held Search Light (solar charged)	Material: Aluminium/ hard plastic(sustain upto -40 deg.), Brightness: 1500 lumen Power source: USB Rechargeable /solar charged Battery- Lithium rechargeable Light Source type: LED Charge time: max- 60 mins Run Time: Turbo- 3-4 hrs, High-3-5 hrs, Medium- 7-9 hrs, Low-10-16 hrs, Eco- 16-24 hrs Protection: IPX7
35	Jumar (Ascender)	Material(s): aluminum, stainless steel, plastic, rubber, nylon , In pairs(right and left) Weight: 165-175 g Rope compatibility: 8 to 13 mm Certification(s): CE or EN or UIAA
36	Rope Climbing - min 100 mtr	Dynamic elongation [%]: 33(±10%) Impact force [kN]: 9,1000(±10%) Core proportion [%]: 64,00 (±10%) Sheath proportion [%]: 36,00 (±10%) Weight per meter [g/m]: 68 gms/m (±10%) Static elongation [%]: 8 (±10%) Number of falls: 9 Certification(s): CE or EN or UIAA Single Rope Rope Type: Dynamic, Diameter- 9.6 to 10.2 mm
37	Rope Static min. 100 mtr	Multiple-wound core for high breaking strength. Tracer threads (indicate rope diameter). Thermo shield treatment for perfect handling. Diameter: 10.5mm to 12 mm. Minimum breaking strength: 28 kN. Static elongation: 3%, Weight- 65-75 gms/m Certification(s): CE or EN or UIAA
38	Tandem Pulley	Attachment point for up to 3 carabiners Stainless steel rollers For steel cables (up to 12 mm) or static ropes (up to 13 mm) Diameter pulley (outside/inside): 38/27 mm (±5%) Weight- 250-275 gms Load capacity: 22-26 kn Certification(s): CE or EN or UIAA
39	Tape Sling 18mm / 25mm wide	Strength: Min 22 kN Material(s): Polyester, Length 60 & 120 cms Polyester sling designed for setting up a belay or an anchor, or for extending an anchor point Certification(s): CE or EN or UIAA
40	Solar Panel For Charging Foldable	Panel material - Amorphous silicon thin film • 2. Peak Power – 30 watt (± 10%) • 3.Voltage at maximum power -15.4 to 17.0 Volt • 4.Open circuit voltage – 17.0 to 22.0 volt • 5.Current at maximum power- 1.8AMP(±10%) • 6. Short Circuit Current – 1.88 to 2.6 Amp • 7. Maximum size while folded – 380mm x220mm(±10%)

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		<p>Fabric Outer - Polyester; 432 g/m², 63% polyester, 23% wool, 10% nylon, 4% elastane (±10%)</p> <p>Weight: 110g to 200g</p> <p>Min Temp - 25°C (Certified so by the OEM)</p> <p>Durable wind and water resistant outer</p> <p>Well insulated and versatile</p> <p>Fleece lined inner</p> <p>Leather quilted palm</p> <p>Stretch insulated low bulk cuff</p> <p>Boxwall finger construction for improved fit</p> <p>Smartphone compatible index finger and thumb</p>
41	double layered gloves/ modular gloves	
42	waterproof Jacket	<p>Type : Waterproof Jacket Breathable & Packable</p> <p>Zip : YKK pit zips with storm guard</p> <p>Fabric : 2.5L with polyester membrane (uses a lightweight yet durable outer fabric as its first layer, the second "layer" is actually a polyurethane laminate or coating applied inside that first layer. Finally, a protective sheen or print (a "half layer") is laid down over that second layer.)</p> <p>Back Length : 69cm/27.2inch (±10%)</p> <p>Weight : 280g to 350 gm</p> <p>Fit : Regular (sizes as per requirement)</p> <p>Waterproofing : HH: 20,000mm/ MVTR: 20,000 g/m²/24 hrs. (±10%)</p>
43	Water Proof Lower	<p>Type : Waterproof Pant Lightest-weight & Packable</p> <p>Zip : YKK knee length YKK side Full zips with storm guard</p> <p>Fabric : 2.5L with polyester membrane</p> <p>Waistband : Elasticated</p> <p>Weight : 280g to 340g</p> <p>Fit : Regular (sizes as per requirement)</p> <p>Waterproofing : HH: 20,000mm/ MVTR: 20,000 g/m²/24 hrs (±10%)</p>
44	Mug	<p>Double-walled stainless steel cup with a lid and handy carabiner grip.</p> <p>250 ml volume with measurement markings inside.</p> <p>free of harmful substances, food safe, unbreakable and easy to clean.</p> <p>Handle- hardened plastic or other material</p>
45	Aluminium Ladder	<p>Ladder Type - Climbing, Step Ladder</p> <p>Foldable</p> <p>Material - High Tensile Aluminum Alloy, size-6ft, 8ft and 12 ft</p> <p>load capacity- 100 kg min</p> <p>Certified : EN or CE</p>
46	Rope Ladder/ Rope etrier	<p>Light weight,</p> <p>High strength,</p> <p>length-160cm (±5%)</p> <p>Width- 30 cm (±5%)</p> <p>Fine finish, All rungs strength-min.5kn</p> <p>Rope Material - Polypropylene/polymide, Alloy spreader Bar</p> <p>Certification: CE or EN or UIAA</p>
47	Avalanche Rod	<p>6-section light alloy avalanche probe with extra compact folded size</p> <p>Pull grips for speedy assembling of sections</p> <p>Automatic latching</p> <p>Teardrop-shaped tip</p> <p>5cm length markings</p> <p>Last segment coloured red for destination recognition and warning</p> <p>Length: 240 cm (±10%)</p> <p>Packing Size: 45 cm (±10%)</p> <p>alongwith Packing Bag</p> <p>Weight: 250-275 gms, (As per IS 11616)</p>

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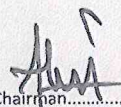
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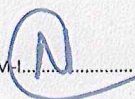
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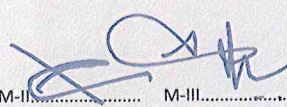
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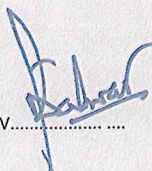
		Material- Polyester & Elastane .rapid dryness,Lightweight Baselayer breathability, Size- As per equirement(S,M,L,XL) rapid drying & odour control
48	Base Layer	Construction : Single jersey fabric Fit : Slim Pockets : No Weight : 160g to 175g (L)
49	Sleeping Bag Light Weight	MHA Approved Specification (Appendix-B)

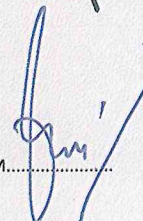

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