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महानिदेशालय/Directorate General
राष्ट्रीयआपदामोचनबल/National Disaster Response Force
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नईदिल्ली/ New Delhi – 110001
Dated 16 May, 2023

**INVITATION OF EXPRESSION OF INTEREST FOR CBRN
EQUIPMENT**

NDRF is the lead federal Force in India responsible for responding to all types of natural and man-made disasters. In order to fulfill its mandate, NDRF has been authorized equipment for responding to Chemical, Biological, Radiological & Nuclear (CBRN) emergencies.

2. NDRF now intends to procure CBRN equipment for each of its 16 Units/Academy, accordingly, NDRF has prepared draft technical specifications for 09 Nos of equipment required for responding to Radiological & Nuclear emergencies are appended as **Appendix-A**.

3. In this context, NDRF is inviting Expressions of Interest (EOI) from eligible manufacturers 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 may kindly provide the specification of the equipment available in the market 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.

4. This EOI is not an offer by NDRF or a tender document but it is an invitation to receive responses from eligible Manufacturers and Vendors in the industry.

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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 and vendor registered in India under relevant applicable Acts and Laws.
- (ii) The entity must have experience of at least 2 years in the supply of such equipment for any Govt./PSU/State/ Pvt. Companies.
- (iii) NDRF may call manufacturers 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) Document supporting Eligibility Criteria as mentioned above.
- (ii) List of equipment/catalog with detailed technical specifications along with estimated cost if possible.

7. NDRF reserves the right to select or reject any of the proposals received against this EOI. Eligible manufacturers/ 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 **26/05/2023**. No hard copy of the documents is required to be submitted. The following emails for your response :

- (i) dig.prov.ndrf@gov.in
- (ii) dcproccell-ndrf@gov.in

8. It is further intimated that if your firm/ concern is in the business of manufacturing/supplying CBRN equipment other than the 09 mentioned in this EoI, in that case, please send a separate email giving details of all such equipment which you think will be of use to NDRF for response to CBRN emergencies.

Important timelines:

Event	Timeline
Last date of submission of responses	26/05/2023



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

(1) Teletector

Technical Specification for Extendable Telescopic Arm type High Range Radiation survey meter:-

1.	Radiation Detected	Beta (β) & Gamma (γ) Radiation
2.	Detectors	2 Nos. G M Detectors Low Range GM Tube: Range 1 μ Sv/h to 2.5 mSv/h (0.1mR/hr to 250 mR/h) High Range GM Tube: Range 0.5 mSv/h -9.99 Sv/h (0.05 R/hr to 999 R/h)
3.	Dose Rate Measurement Range	Two GM tubes to cover dose rate ranging from 0-9.99 Sv/h (0-999 R/hr). Range selection shall be automatic and switching among the two GM tubes shall also be automatic.
4.	Instrument Dimension Front Panel	Approximate Width:15-20 cm, Height:10-12 cm
5.	Telescopic Arm	<ul style="list-style-type: none"> • Telescopic arm shall be made of stainless steel with GM tubes (detectors/probe) mounted at the end of the telescopic arm. • The telescopic arm shall be continuously extendable (without lock/unlock mechanism) up to approximately 400 cm; its end carries the two GM tubes (detectors/probe). •The Telescopic arm should not have lock/unlock mechanism • The telescopic arm shall be rigid even when fully extended. • Approx. Telescope Length in (retracted position): 95-100 cm • Approx. Telescope Length in (extended position): 400 cm
6.	Instrument Housing	Aluminum Casting, perfectly sealed with no gaps
7.	Response Time	2 Second approximately.
8.	Energy Response	65 KeV to 1.4 MeV
9.	Accuracy	\pm 15% above 1 μ Sv/h (0.1 mR/h) with ⁶⁰ Co source
10.	Display	Digital 4 digit LCD(0.5") (illuminated) or Analog Meter in 5 (five) scales with vibration and shock resistance.
11.	Batteries	4 x 1.5 Volts size R14 Alkaline Cells
12.	Low Battery Indication	Low Battery indication should be available
13.	Weight	Up to 3 Kg (approx.)
14.	Temperature	-20°C + 50°C
15.	Accessories	4 m PVC sleeve, Carrying case and manual of the instruments
16.	Calibration certificate	Yes
17.	Warranty	One Year from the date of delivery

(2) GM Based Radiation Survey Meter

Technical Specification for Portable Radiation Survey Meter:-

1.	Radiation Detected	Gamma and X-rays
2.	Detector	Miniature halogen quenched internally mounted energy compensated GM & window
3.	Energy Response	100 KeV to 1.3 MeV
4.	Measurement range	Four Linear Ranges 0 to 5 mR/hr, 0 to 50 mR/hr, 0 to 500 mR/hr, 0 to 5000 mR/hr
5.	Range Selection	By push buttons
6.	Indications	Four LEDs for range and one for LO BAT
7.	Accuracy	$\pm 20\%$ of reading with Cs-137
8.	Response Time	Less than 5 sec.
9.	Readout	Analog (with 50 divisions)
10.	Sound	Piezo buzzer chirps
11.	EHT	500V DC
12.	Power	4-5 Alkaline Pencil Cells AA size 1.5 V or equivalent
13.	Controls	A) ON/OFF B) Range Selection
14.	Construction Material	Aluminium or ABS Plastic or equivalent
15.	Handling	Compact and easy to handle
16.	Weight	Approx. 400 gm
17.	Manual	Each instrument should be provided with its operating manual
18.	Temp. Range	-20°C + 50°C
19.	Warranty	One Year from the date of delivery

(3) Alpha(a), Beta (B), Gamma (γ) Contamination Monitor

Technical Specification:-

1.	Types of Radiation to be Detected	Alpha, Beta, Gamma and X-ray.
2.	Detector	Plastic Scintillator coated with ZnS(Ag) - dual phosphor scintillator phoswich type
3.	Gamma sensitivity	Approx. 35cps per $\mu\text{Sv/h}$ or better
4.	Display	LCD display (Size : Min. 3.5 cm x 2 cm)
5.	Detector window active area	Approx. 100 cm ²
6.	Window Thickness	Approx. 0.90 mg/cm ² aluminized plastic film or less
7.	Efficiency	20% or more for Am-241 a-particle 40 % or more for Sr/Y-90 B-particle
8.	Measurement Unit	Bq, Bq/cm ² , DPM and CPS).
9.	Measuring Range	0.01 to 100,000 cps
10.	Weight	Max. 1.5 kg
11.	Alarm	Acoustic with alarm thresholds for a and B-y
12.	Battery	Standard Size 2 C Alkaline Batteries
13.	Rugged and compact design, thick rubber protection covers.	
14.	Internal Data Memory	1000 measured values with date & time
15.	Operation modes	(a) Scaler/ Timer with pre-set count and pre-set time for sample measurements (b) Continuous ratemeter mode for frisker operation (c) Alpha, Beta, and Alpha + Beta modes (d) Gross or net counting
16.	Audible indication	Single pulse for Alpha, Chirper mode for Beta – Proportional to count rate
17.	Working Temp.	-20°C to + 50°C
18.	Storage Temp.	-25°C to + 50°C
19.	Warranty	One Year from the date of delivery

(4) Beta-Gamma Contamination Monitor

Technical Specifications:-

1.	Radiation Detected	Beta (β) & Gamma (γ)
2.	Detector	GM Probe (pancake GM tube) with suitable connector and β/γ discriminator (areal density - 1.5 -2.0 mg/cm ² , Effective dia = 1.75")
3.	Count Rate Range	Up to 50 KCPM (option for display of reading in cps, Bq/cm ²)
4.	Time Constant	Auto or Manual
5.	Energy Response	200 KeV to 2 MeV @662 keV
6.	Accuracy	$\pm 15\%$
7.	Display	16 x 2 Character Back-lit LCD
8.	Chirp	Buzzer sound
9.	Alarm	Audio & visual settable alarm
10.	Power	Rechargeable batteries with battery charger & 230V AC.
11.	Operating time	Approx. 10 hrs
12.	Size (in cm)	Max. (15 cm x 10 cm x 5 cm)
13.	Provision for single hand operation	Detector probe (required to be detachable) can be attached to the instrument so as to conduct frisking and instrument holding by single hand.
14.	Carrying case	Carrying case with belt.
15.	Temp. Range	-20°C to + 50°C
16.	Warranty	One Year from the date of delivery

(5) Electronic Personnel Dosimeter

1.	Radiation	X-rays, Gamma Radiation (> 40 keV)
2.	Detector	PN Junction Silicon Semiconductor
3.	Measurement Range	1 to 99999 μ Sv
4.	Energy Dependence	Within \pm 30% from 60 keV to 1.2 MeV
5.	Sensitivity	1 count per μ Sv
6.	Readout Accuracy	Within \pm 10% for Cs137, up to 0.5 Sv/hr (Calibration with Cs137)
7.	Dose Rate Range	Within \pm 10% (0.5 Sv/h), Within \pm 20% (5 Sv/h)
8.	Operating Environment	0-45°C or beyond, 90% RH (Non-condensing)
9.	Battery	Coin-type Lithium battery (CR 2450, 3V)
10.	Battery Life	Continuous use for 1000 hours (approx)
11.	Display	6 digit LCD
12.	Dimensions (WxLxD) (in mm)	Max.(35x 125 x 15 mm) excluding clip
13.	Weight (in gm)	Max. 70 gm
14.	Accessories	Magnetic Rack (with capacity to hold at least 25 Nos) Extra Batteries (CR 2450, 3V single cell 560 mAh) at least 150 Nos.
15.	Calibration Certificate	Calibrated by Cs137 source
16.	Test Certificate	Drop Test (1.2 m height), EMI Test (As per EMC product standard)
17.	Warranty	Min. 3 years
18.	Temp. Range	0°C to + 45°C

(6) Go/No-Go Instrument (Vehicle Mounted Radiation Alarm Type Detector)

Technical Specifications:-

1.	Radiation detected	Gamma
2.	Detector	Halogen quenched GM detector
3.	Energy response	100 KeV to 1.3 MeV
4.	Range	100 µR/h to 10 R/h
5.	Preset Alarm Limits	0.05 mR/h, 0.1mR/h, 0.5mR/h, 1mR/h, 10mR/h & 100mR/h; Adjustable
6.	Minimum Detectable Activity	1.5 mCi of Co-60 at a distance of 4 meters or better (note: source in unshielded condition)
7.	Power source	External 12 VDC (11V 14.5 V) Arrangements for connecting to the vehicle battery with suitable grade wires and terminals
8.	Indicators (Visual)	Green LED for Power ON status and normal radiation level Red LED for radiation level above alarm limit.
9.	Audible Alarm	Piezo buzzer
10.	Response Time	Less than 10 sec.
11.	Weight	150 gms or less
12.	Dimensions	110 mm (L) x 65 mm (W) x 35 mm (H) or Smaller
13.	Over range indication	with a blinking RED LED
14.	Operating Temperature : Range	-10°C to +50°C
15.	Operating Humidity	5 to 95 % RH, non-condensing
16.	Warranty	3 years onsite

Note: The detector unit should not malfunction due to the current surge while starting the vehicle engine.

(7) Iodate Tablets

1.	Each uncoated tablet	170 mg KIO ₃
2.	Stable iodine in each tablet	100 mg
3.	Packaging and Labelling	Pharmaceutical packaging with prescription labels, name of the vendor, manufacturing date and expiry date, and others as per FDA standards.
4.	Dose Rate	For Adults: 170 mg For Child (below 12 Years): 85 mg
5.	Shelf Life	5 Years Storage under cool & dry conditions at temperature below 25°C

(8).Personal Radiation Detector

1. Brief:

- 1.1. Direct reading personal dosimeter should have a damp and dustproof body with a high ingress protection rating, designed for use by the NDRF in conditions of significant temperature variation and other ambient air condition.
- 1.2. It should be able to be used either independently or within the automated system of personal dosimetry control.
- 1.3. The dosimeter should allow storage of dose accumulation history with real time reference in the physical memory and communicating it to the computer.
- 1.4. The dosimeter should be able to actuate light and audio alarms if the programmed threshold levels of gamma dose or its rate are exceeded.
- 1.5. The equipment should Conform to the CE standards and should be able to meet the requirements of IEC 61526 standards.

2. Equipment should be able to:

- 2.1. Measure gamma and X-ray radiation individual dose equivalent rate (DER).
- 2.2. Measure gamma and X-ray radiation individual dose equivalent (DE).

3. Equipment should have:

- 3.1. Clock, alarm clock.
- 3.2. IP54 ingress protection rating or more
- 3.3. Stand-alone use or use within automated system of personal dosimetry control.
- 3.4. Storage of dose accumulation history in the physical memory with real time reference.
- 3.5. Capability to transfer dose accumulation history to the computer.
- 3.6. Provision for blocking of accidental switching off of power supply switch until the data reading procedure is finished.
- 3.7. Gamma radiation DER and DE threshold levels programming with the help of the computer or manually with control keys.
- 3.8. Light and audio alarms when programmed threshold levels are exceeded on DER and DE of gamma radiation.
- 3.9. Display automatic switch off if current gamma background is lower than the preset threshold level with instant switching on at:

- 3.9.1. Pressing any control key;
- 3.9.2. Gamma background increase above the preset threshold levels;
- 3.9.3. Alarm clock ringing.
- 3.10. Periodic self-testing of batteries and detector.
- 3.11. Energy-compensated Geiger-Muller counter.
- 3.12. Warranty for minimum 3 years with service and spare parts support for not less than 15 years.

4. Technical Specifications

Technical parameters	Unit	Range
Measurement range of gamma and X-ray radiation individual dose equivalent rate HP(10)	μ Sv/h	$1.10^{-7} \dots 1\text{Sv/h}$
Main relative permissible error limit when Measurement of gamma radiation DER at ^{137}Cs calibration with a confidence probability of 0.95 - In the range from 1.10^{-6} Sv/h to 1.10^{-5} Sv/h (inclusive) - in the range from 1.10^{-5} Sv/h to 1 Sv/h	%	20% 15%
gamma and X-ray radiation individual dose equivalent HP(10)	mSv	0.001...9999; $\pm 15\%$
Energy range of registered gamma and X-ray radiation and energy dependence	MeV	0.05...6.0; (0.05...1.25; $\pm 25\%$)
Recording resolution of dose accumulation history in the physical memory	minutes	5...255
Time of data storage in the physical memory	years	Not less than 10
Data exchange rate through the infrared port	Bit/S	Not less than 38400
Positive data exchange distance between the dosimeter and the infrared port adapter	m	not more than 0.3
Battery life (under gamma background not more than 0.5 1.6v/h, switched off alarm system and display)	hours	Not less than 3500
Operating temperature range	$^{\circ}\text{C}$	-20...+50
Weight	kg	Not more than 0.15
Dimensions	mm	100 x 60x 20 mm or less

Note-Equipment should be delivered with:

- Operating manual;
- Hard case packing box.

(9). Portable Personal Decontamination Unit

- 1.1. Decontamination involves the removal or neutralization of hazardous substances from people, equipment, and the environment. Anyone or anything exposed to a hazardous material must be properly decontaminated in order to stop further exposure thereby preventing any further damage. Decontamination shelter must be able to decontaminate the contaminated victims.
- 1.2. It should be comprised of a decontamination shower system fed with decontaminant solution and spray nozzles to provide adequate water mist required. The complete structure should be held with Guy Ropes to ensure stability at high air velocity conditions, if prevailing.
- 1.3. The equipment must be transportable by road, train, ship and plane as per the international transport regulations. It should be transportable to the desired location on standard transport vehicles and trailers.

2. Decontamination Capacity (effectiveness):

- 2.1. Equipment must be capable of reducing chemical contamination (by chemical warfare agents or TICs). Likewise, they should be able to remove biological / nuclear-radiological agents and neutralization.
- 2.2. The equipment should be easily de-contaminable, even during its operation and compatible with the decontaminating solutions that are employed.
- 2.3. The Substances (decontamination solution) used as decontaminants should not degrade personnel, equipment and decontaminated vehicles.
- 2.4. The shelter must include all the operational and maintenance documentation with a correct compression for the personnel in charge of both tasks.
- 2.5. The decontamination station units must be capable of operating in adverse climatic conditions.
- 2.6. Electrical-electronic systems included in the equipment must not interfere with general electronic systems, communications, NBC detector systems, etc. being used for the operation.

3. Shelf life:

- 3.1. The equipment should have a minimum shelf life of 15 years (operating 80% during this time), in the same way.

4. Maintenance and logistics (equipment / consumables):

- 4.1. The Decontamination station must have the necessary accessories in terms of shock proof electricity supply, necessary plumbing using flexible pipes, lighting system, tools and spare parts etc.
- 4.2. The electrical/ electronic equipment accessories must comply to the relevant CE certifications as regards the radiation and noise levels.
- 4.3. All items forming part of the Station must be easy to operate, even with the NBC PPE gear.
- 4.4. An effective training for the users must be imparted to the end user on installation/ un-installation, maintenance and storage of the Shelter and the accessories.

- 4.5. All the water supply couplings should be of Barcelona fitting type and their adaptations to receive water from a fire hydrant system. The main Hose receiver must be compatible with the universal hose couplings used by the Fire department in the fire bowsers and tankers so that the required water supply to the station may be maintained using the fire tankers.

5. FEATURES

- 5.1. Required Decontamination capacity per hour : Not less than 120 people per hour.
- 5.2. Water storage autonomy : Should have capacity of water storage for minimum 50 minutes.
- 5.3. Transportable by land (road and rail), sea and air
- 5.4. It should be Lightweight and portable.
- 5.5. Must have quick setup three chamber column with three columns in each Decon Station, which must be easy to set up.
- 5.6. Of the three Columns, two on each side will be used for decontaminating the ambulatory victims whereas the middle column should have provisions for decontaminating the non-ambulatory victims.
- 5.7. The middle column should have stainless steel collapsible rolling tray for sliding the stretcher of the non-ambulatory victims.
- 5.8. The plumbing system inside the shower rooms must have provision for water spray through Mist nozzles for spraying of water/decon solutions at varying pressure requirements for proper decontamination of humans.
- 5.9. All shower rooms within the Decon Chamber must be hermetically sealed to prevent the contaminated water/discharge from reaching the dressing and undressing chambers.
- 5.10. The shower Chamber of the decontamination shelter should have water collection system to collect the contaminated discharge to be pumped out into inflatable water using the self-actuating pumps.
- 5.11. The shelter of the decontamination station should have an integral detachable groundsheet with additional Hard Rack for additional support.
- 5.12. All electrical systems inside the chambers must have shockproof and spark proof interconnections which can easily be attached or detached at the time of installation and uninstallation.
- 5.13. Electrical Cables used inside the shelter must be Fire Retardant.
- 5.14. Portable area lighting must also be provided with the station. Additional handheld searchlights must also be provided with the system for any emergent exigency.
- 5.15. The beacon station must have a collection capacity of not less than 1000 litres in the form of inflatable tanks for collection of contaminated discharge from the shower chamber.
- 5.16. The inflatable shelter should be easy to instal very quickly with the help of air cylinder as well as electrically operated pneumatic pumps.
- 5.17. The decontamination station must also have inflatable water tanks with storage of not less than 2000 litres to store clean water for use in shower system.
- 5.18. Two separate electrically operated water pumps will be required for Inlet and Outlet.
- 5.19. The inflatable shelter must have sufficient Guy ropes with Tent Pegs for securing it in position during high wind velocity conditions.

5.20. The decontamination zone should have at least 3 decontamination Lines (columns) with spray showers that allow a maximum capacity of 150 people / hour (50 people per line with treatment lasting two minutes each).

5.21. Showers system should be in doubles allowing two steps in each of the treatments, the first step for washing with decontaminant and the second step for rinsing. The lines should be separated from each other with a minimum space of not less than 600 mm.

5.22. There should be a provision for defining the duration of each phase of shower which may be continuous or discontinuous and programmable manually or automatically, as required by the operator.

5.23. The floor of the showers area should be formed by a floor that prevents the immersion of the feet of the personnel to be decontaminated with the effluents collected in the water recovery vessel. This may be achieved with the help of the pump which are to be connected by means of a flexible pipe to the flexible inflatable tanks.

6. The Decontamination station should have the following defined zones:

6.1. Undressing area

6.2. Decontamination area with shower lines and technical zone

6.3. Drying/dressing area

7. Required Accessories

7.1. Robust and sturdy Bag for housing and carrying the inflatable shelter

7.2. Guy ropes of sufficient strength along with tent pegs

7.3. Repair kit with puncture repair patches

7.4. Inflation hose – Not less than 5 m

7.5. Electric Inflator

7.6. Air Cylinder with regulator for Inflation

7.7. Decontamination solution

7.8. Self-actuating Water pumps.

7.9. Pedestal fan

7.10. Rechargeable Lights

7.11. Flexible field electric lines with waterproof Plug & Socket system

7.12. Hand shower

7.13. Linen rack

7.14. Trash Bins with Lid

7.15. Hand Brush

7.16. Liquid soap

7.17. Towels

7.18. FR Cables IS 17505 (Part 1)

7.19. Inflation & Deflation Valves

7.20. Stretcher with wheels

7.21. Privacy Blinds

8. The pumps should have the following characteristics:

- 8.1.1. Discharge rate : 50 Litres to 150 Litres per minute (Min-Max)
 - 8.1.2. Protection : IP 68
 - 8.1.3. Height of water collection : 2mm
 - 8.1.4. Hose length from container to flexible tank : Minimum 10 meters
- 8.2. The floor of the showers should be non-slippery with sufficient inclination to produce a rapid drainage of the effluents in the channel that in turn should reach the pump that drives the effluents outside.
- 8.3. The system must have an initial capacity of 2,000 litres of water (using the flexible inflatable tanks) to immediately start decontamination without external means.

9. INFLATABLE HIGH-PRESSURE TENTS

- 9.1. The areas before and after the decontamination area, i.e., the undressing area and the drying and dressing area should be designed to accommodate multiple users. The shelter should have rapid assembly without tools or special training by the assembler that allows the interconnection.
- 9.2. The inflatable shelter should have 3 modules (chambers) in each column with overall dimension of the tent should not be less than 17 feet by 22 feet in width and length respectively.
- 9.3. In deflated condition the shelter should be able to be contained in foldable bag with dimension not more than 5 feet X 2 ½ feet X 1 ½ feet in length width and height respectively.

10. TECHNICAL SPECIFICATIONS INFLATABLE HIGH PRESSURE TENT

- 10.1. The inflatable shelter the decontamination station should be able to be deployed in less than 10 minutes by not more than three persons working together.
- 10.2. The inflatable tent should have a wind resistance of not less than 85 kilometres per hour for 30 minutes for both front and side with capacity to tolerate 100 kilometre per hour for 10 seconds with all the anchors.
- 10.3. The tent should have so rain resistance of not less than 40 litres per square metre per hour for 30 minutes without any leaks.
- 10.4. It should have a snow acceptability not less than 40 KG per square metre for 12 hours.

11. FABRIC SPECIFICATIONS

11.1. The fabric to be used in the cover of inflatable shelter should follow the following specifications:

TEXTILE	TAFFETA	
COMPOSITION POLYESTER	100%	
WEIGHT	Not more than 550gr/m2	UNE-EN ISO 2286-2
TENSILE STRENGTH (WARP/WEFT)	Not less than 14 daN	DIN 53363
TEAR RESISTANCE (WARP/WEFT)	Should be able to sustain not less than 175 daN/ 5cm	EN-ISO-1421
TREATMENT ANTIPUTREFACTIVE	YES	
REACTION TO FIRE		NM-E-188 EMA
COLOUR	Fluorescent Orange or Yellow	

12. FLOOR FABRIC SPECIFICATIONS

WEIGHT	Not more than 700 g/m2	EN ISO 2286-2
TENSILE STRENGTH	Not less than 2400 N/5cm	EN ISO 1421
TEAR RESISTANCE	Not less than 250 N	DIN 53363
FLEXURAL STRENGTH	Not less than 100000	DIN 53359 A
MATERIAL	PES	ISO 2076
THREAD	1100 dtex	ISO 2060
COVERING	PVC	
FIRE BEHAVIOUR	M-2 B1	UNE 23.727 DIN 4102

13. STRUCTURE SPECIFICATIONS

13.1. The main arch should be formed by a high-pressure hose with a width of about 11mm made of POM (Polyacetal or Polyoxymethylene). There should be a provision for inflating the arch through a pneumatic system.

13.2. Transverse bars made of aluminium tubes, not less than 40mm should separate the arches in two sections allowing the inflatable arches tensing. Each section should comprise of three rods, a top and two sides.

14. INFLATION SYSTEM

- 14.1. The inflation system should have a hose of polyurethane with several outlets. This hose should be connected to the compressor supplied with the store.
- 14.2. The compressor should have a capacity to inflate the system within 10 minutes.

15. AIR COMPRESSOR SPECS

- 15.1. The air compressor to be supplied with the inflatable decontamination shelter should not be less than 2HP of power and should be able to generate a flow of not less than 350 litres per minute with a pressure of 10 bar.
- 15.2. The compressor should be lightweight and portable with the dimension of not more than 65 X 40 X 45 centimetres.

16. COLLAPSIBLE WATER TANK SPECS

- 16.1. Two flexible tanks each for storage of water as well as contaminated discharge must be supplied with a minimum capacity of 2000 litres each. There should be a provision for deer lifting by using cranes with the help of welded webbings.
- 16.2. They fabric These storage tank should be resistant to the decontaminant mixture and the Chemical or Biological warfare agents incorporated in the effluents.
- 16.3. The tanks should have 2 mouths, inlet and outlet with 45 mm barrel fitting.

17. PORTABLE WEATHER STATION

- 17.1. The inflatable decontamination station should be provided with a portable weather station which directly measures barometric pressure, air temperature, relative humidity, rain gauge, wind speed and direction.
- 17.2. It should have a device for direct data visualization which can be connected to a PC. No weather station able to operate on minimal energy conjunction and which can be connected to mains or with internal Batteries.
- 17.3. It should be able to be instal in dependently away from the decontamination station.



Bid Number/बोली क्रमांक (बिड संख्या):
GEM/2023/B/3456054
Dated/दिनांक : 17-05-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	27-05-2023 18:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	27-05-2023 18:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	30 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Home Affairs
Department Name/विभाग का नाम	Central Police Organisation
Organisation Name/संगठन का नाम	National Disaster Response Force Ndrf
Office Name/कार्यालय का नाम	Hq Ndrf New Delhi
Total Quantity/कुल मात्रा	1
Item Category/मद केटेगरी	Expression of Interest for CBRN Equipment (Q3)
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	No
Type of Bid/बिड का प्रकार	Single Packet Bid
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	5 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation

EMD Detail/ईएमडी विवरण

Required/आवश्यकता	No
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ePBG Detail/ईपीबीजी विवरण

Required/आवश्यकता	No
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Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

2. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.

3. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

Pre Bid Detail(s)

Pre-Bid Date and Time	Pre-Bid Venue
24-05-2023 15:00:00	6th Floor, NDCC-II Building, Jai Singh Road, HQ DG NDRF, New Delhi

Expression Of Interest For CBRN Equipment (1 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Brand Type/ब्रांड का प्रकार	Unbranded
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Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	Download
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Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Bhawani Singh	110001,HQ DG, NDRF, 6TH FLOOR, NDCC-II BUILDING, JAI SINGH ROAD, NEW DELHI	1	15

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें**1. Buyer Added Bid Specific ATC**

Buyer Added text based ATC clauses

Please submit the response as per terms and conditions of Expression of Interest.

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

---Thank You/धन्यवाद---