

**TECHNICAL SPECIFICATION AND TRIAL DIRECTIVES OF VICTIM LOCATION CAMERA WITH BREACHING SYSTEM**

<b>S/ No</b>	<b>Specification</b>	<b>Requirement</b>	<b>Trial directives</b>
1	<b>Temperature Range</b>	The system should be capable of operation in a temperature range of -10 <sup>0</sup> to +50 <sup>0</sup> C.	BOOs to check and verify the parameter through NABL or Govt approved lab certificate/OEM certification
2	<b>Camera Capability</b>	Minimum 4-megapixel colour video camera fitted with LEDs to illuminate minimum 5 meters in total darkness and provide clear video & images.	BOOs to physically check the measurable parameter and other parameter through NABL or Govt approved lab certificate/OEM certification
3	<b>Battery</b>	The batteries must be capable of 3 hours of continuous use and the charger should recharge them up to 90% in less than three hours as per given QRs/ Specifications, after being used continuous for 3 hours in field.	BOO to physically check and verify the parameter
4	<b>Display</b>	i. Two display monitors: min. 7 inch at operator level & min. 10 inch for remote viewing at least 20 mtrs away. Wired or wireless. ii. Integrates two-way audio. iii. Touch screen display with high-resolution TFT LCD/LED.	For (i & ii) BOOs to physically check the parameters.  For (iii) BOOs to physically check the parameter and also to check NABL or Govt approved lab certificate/OEM certification
5	<b>Language Support</b>	Hindi or English(Both are eligible)	BOOs to physically check and verify the parameter
6	<b>Video Image</b>	i. Sensor: Minimum Four Megapixel CMOS Sensor. ii. Image Resolution: HD Quality. iii. Video Resolution: HD Quality.	BOOs to check and verify the parameters through NABL or Govt approved lab certificate/OEM certification
7	<b>Zoom</b>	Digital Zoom: Min 4X Storage: 32 GB for video storage	BOOs to physically check and verify the parameters.
8	<b>Water Resistance</b>	Minimum IP 64 or better	BOOs to check and verify the parameter through NABL or Govt approved lab certificate/OEM certification
10	<b>Humidity</b>	Operational range - 10% to 90% relative humidity	BOOs to check and verify the parameter through NABL or Govt approved lab certificate/OEM certification
11	<b>Features</b>	i. Complete victim location system with camera mounted on a rigid telescopic frame extendable to length >6m. ii. Articulating pole up to 180 degree angle or better. iii. Diameter of camera and pole should be less than the	BOOs to physically check and verify the parameters.

		diameter of the bit of the breaching system.	
12	<b>Accessories</b>	<ul style="list-style-type: none"> <li>i. Separate remote hard-wired display monitor with extension cable to 20m.</li> <li>ii. Carrying Harness: Ergonomic harness for hands-free operation and comfortable transport.</li> </ul>	BOOs to physically check and verify the parameters.
13	<b>Power Head Weight</b>	Not more than 12 kgs	BOOs to physically check and verify the parameter.
14	<b>Boring Speed</b>	<ul style="list-style-type: none"> <li>i. Standard construction concrete grade may be specified as <b>M25 to M40</b></li> <li>ii. The breaching system should be able to bore through min of <b>10 cm thick standard grade construction concrete</b> of grade M25 to M40.</li> <li>iii. The boring speed of the breaching system should not be less than <b>2.5 cm per minute</b> in standard construction concrete of grade M25 to M40.</li> </ul>	<ul style="list-style-type: none"> <li>i) BOO to check and verify the parameter by using the breaching system on standard construction concrete grade i.e. M-25 to M40 (Slabs to be casted accordingly for evaluation)</li> <li>ii)BOO to physically measure and verify the parameter</li> <li>iii)BOO to physically check and verify the parameter</li> </ul>
15	<b>Bits</b>	Minimum diameter of 51mm and minimum length of 432mm for diamond and carbide stubbed bits.	BOOs to physically check and verify the parameter.
16	<b>Cooling</b>	Pressurized water can, min 8 Ltr capacity with not less than 3 m hose with quick connect fittings.	BOOs to physically check and verify the parameter.
17	<b>Field Service Kit</b>	<ul style="list-style-type: none"> <li>i. Spare fuel tank cap</li> <li>ii. Spare pre-wound starter recoil assembly</li> <li>iii. 2-piece key set for starter assembly</li> <li>iv. Spare spark plug</li> <li>v. Spare plug wrench</li> <li>vi. Copper washer</li> <li>vii. Garden hose to water collar adapter</li> </ul>	BOOs to physically check and verify the items mentioned in kit.
20	<b>Spindle</b>	As per manufacturer standard.	BOOs to physically check and verify the parameter.
21	<b>Breaching Depth</b>	Maximum 2 extensions to achieve a length of 1m from Breaching system	BOOs to physically check and verify the parameter.
22	<b>Dry Weight of Equipment</b>	Dry Weight- Maximum 17 Kgs (Which includes maximum weight of telescope probe with camera - 05 Kgs and maximum power head weight - 12 Kgs	BOOs to physically check and verify the weight.
23	<b>Guarantee/Warranty/Service Support</b>	<ul style="list-style-type: none"> <li>i. The bidder should be able to conduct the repairs of the tools post warranty (minimum one year) period</li> </ul>	OEM/Bidder to provide undertaking for the same.

		<p>for minimum ten years at a place as specified in the bid.</p> <p>ii. Bidder / OEM to provide an undertaking for the same.</p>	
24	<b>Training</b>	<p>i. Two days base workshop level training to NDRF personnel in OEM/Firm premises/Location in India, on full-fledged running, testing, diagnostic, trouble shooting and maintenance.</p> <p>ii. 1 day operator level training should be provided at user defined location.</p>	OEM/Bidder to provide undertaking for the same.
25	<b>Carry Case</b>	Injection molded ABS case with safety compartment inside.	BOOs to check and verify the parameter through OEM certification.