

**DRAFT QRs/TDs OF MULTI SHOT ROBOTIC EOD DISRUPTER**

<b>S No</b>	<b>Qualitative Requirements</b>	<b>Trial Directives</b>
1	Multi-Shot Robotic EOD disrupter is used to disrupt IED/ Bombs to render safe the explosive device and should be specific built for this reason	OEM certification to be checked by BOO
2	The life of the equipment should be atleast 10 years	BOO to check the OEM certificate OEM to provide two copies of certificate stating the life of the equipment (one certificate laminated and one unlaminated) as part of the equipment accessories for each equipment supplied during supply.
3	The system should have a specific mechanism which minimises the recoil. There should be no counter-shot mass or recoil debris	BOO to physically check the same by firing the equipment by any projectile (as desired by the BOO). The projectile should be provided free of cost by the seller
4	Should be capable of being operated with any ROV or in a standalone manner (both compatibilities required). Corresponding attachments for ROV and stand for placing in uneven terrain are required to be part of the kit supplied. Should not damage the ROV when fired. Any damages to the ROV during trials to be rectified to complete satisfaction of user by the seller. Such damages to ROV will be seen as a equipment failure.	BOO to check physically the universal attachment for ROVs and undertaking by seller for ROV repair clause

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5	The equipment should be provided with (one (universal) or more) mounting stand which should be stable and should permit movement of the disrupter in 360° horizontally (plane parallel to ground) and -90° to 90° vertically. The equipment should be capable of being firing a target at 5 cm from the ground (minimum capability - If firing targets lesser than 5cm, then the equipment is satisfactory).	BOO to physically check the same
6	The equipment should be provided with a multipositioning tripod/ quadrapod (or any other equivalent stand capable of achieving the required function) which can provide sufficient ground clearance to the equipment during stand-alone operation for firing.	BOO to physically check the same
7	All fasteners (screws, washers, bolts and nuts) in the equipment and accessories should be of Metric/ Imperial Standard and should be easily available in the local market (cheaply) and should not be a proprietary item. OEM to provide an undertaking for the same.	BOO to check an undertaking provided by the OEM
8	Should have a laser aiming device which can be calibrated in less than 2 minutes (from a fully un-calibrated state). The laser should have high power, sufficient to see the laser point on the target clearly during bright day time, from the farthest safe point of operation (the farthest safe point is the largest range for any projectile offered plus the safety distance)  Optional : Additional Holographic sight might be required by the user (mentioned during tender process)	BOO to physically check the same
9	The device must be capable of storing upto 8 catridges in the magazine (which is mounted on the device itself)	BOO to physically check the same
10	The minimum operational range required (by any one charge/ projectile) is 15 cm - any thing lesser than 15 cm is satisfactory	BOO to check the specifications

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11	The maximum operational range required (by any one charge/ projectile) is 10 m - any thing more than 10 m is satisfactory	BOO to check the specifications
12	Should have flexibility to select low, medium and high velocity jets/ projectiles	BOO to check the specifications
13	The disruptor, with any one kind of projectile, should be capable of cutting a 25mm Diameter, 3mm thick MS Pipe. OEM/ vendor to provide free charge and projectile for testing	BOO to physically check the same
14	The device should be capable to remotely select any shot in any order	BOO to physically check the same (without firing)
15	The device should be capable of firing upto 7 shots remotely, without requiring to come back to base between shots, for any reason. The device should also be capable to have different kinds of projectiles in its magazine.	BOO to physically check the same (without firing)
16	Water should be capable of being injected and stored in the barrel remotely	BOO to physically check the same (without firing)
17	Should use standard EOD disruption cartridges. Atleast 9 types of cartridges/ projectiles, apart from water jet cartridge are required to be provided with the device. 25 pieces of each of the 9 types of cartridge/ projectiles are to be provided with the device. In addition, atleast 50 target practice cartrdges (for practice and zeroing) are required to be provided with the equipment. A zeroing chart is to be provided with the equipment. The user must not be required to purchase any other item for use of these cartridges.	BOO to physically check the same (without firing)
18	Both the OEM and the supplier should provide an undertaking to ensure availability of spares in India for atleast 20 years make spares, consumables, cartridges and ammunition.	OEM undertaking to be checked by BOO



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19	The device should have full remote control of shot loading, reloading and water injection. The device should also be capable of remote cartridge extraction.	BOO to physically check the same (without firing - If firing is required, then the same will be done at sellers cost)
20	The firing pin should have very low maintenance and the life of the pin should be atleast 10 years under all conditions. The warranty for the firing pin and related accessories should be atleast 10 years (life of the equipment)	OEM undertaking and warranty certificate to be checked by BOO
21	The device should have a screen with user interface, which has the following:	BOO to physically check the same
	Selection of EOD ammunition and cartridge	BOO to physically check the same
	Capability to Arm the equipment, loading of rounds and unloading of rounds	BOO to physically check the same
	Should have status indicators indicating the current ammunition, arming status, laser status, etc	BOO to physically check the same
22	The device, the projectiles and the cartridges supplied should be capable of being operated at -25°C to 50°C	OEM Certificate to be checked by BOO
23	Two sets each (hardcopy) of information booklet, instruction manual and maintenance manual (with detailed maintenance instructions for all kinds of contingencies, as defined by the company) should be made available. One set of softcopy should also be made available for each.	BOO to physically check the same
24	The equipment should have very sturdy connectors for electrical wirings and water lines. The warranty for all the connectors should be atleast 10 years (the life of the equipment) under all conditions. The connectors should be universally available (non-proprietary) in Indian commercial market. The type of the connectors should clearly be specified in the information booklet	OEM undertaking and warranty certificate to be checked by BOO
25	All wires, cables and water lines used in the equipment should be universally (non-proprietary) available in the Indian commercial market.	OEM undertaking and warranty certificate to be checked by BOO

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26	The wires, cables and water lines that are exposed outside the equipment should be sufficiently armoured and should have a warranty of 10 years (life of the equipment) under all conditions	OEM undertaking and warranty certificate to be checked by BOO
27	The equipment should be provided with a toughened carrying case (hard case Plastic/ nylon/ aluminium or equivalent/ better material)	BOO to physically check the same
28	Adequate Training material, including print material and videos, for operation and maintenance of the equipment should be provided.	BOO to physically check the same
29	Two sets of maintenance tools and sufficient consumables (for 100 shots) should be supplied with the equipment	BOO to physically check the same
30	All kinds of specialised grease, oils, cleaning agents and lubricants required for the routine maintenance of the equipment should be supplied (for atleast 100 shots).	BOO to physically check the same
31	The equipment should have atleast 5 year warranty (all covered).	OEM undertaking and warranty certificate to be checked by BOO
32	Optional Clause : Option of having an all covered Comprehensive Annual Maintenance Contract by the supplier/ OEM should be available at a rate not more than 10% (per annum) of the equipment cost. This shall be enforced by the buyer at any time after the expiry of the warranty till the expiry of the life of the equipment, without any escalation in cost of the equipment. Sufficient consumables, tools, ammunition and cartridges for one year's operation also forms part of the CAMC clause. Both the OEM and the supplier should provide an undertaking in this regard.	OEM undertaking to be checked by BOO
33	<b>Training</b> – The firm should provide initial training on use & maintenance of the eqpt at least two times in first year. Provide undertaking regarding the same.	OEM undertaking to be checked by BOO

#### **OFFICIAL ADDRESS FOR VENDOR'S COMMENTS**

The official address of vendor's comments is as under :-

HQ National Security Guard  
Ops & Training Directorate  
WE Branch, Room No 145  
Mehram Nagar  
Near Domestic Airport Palam  
New Delhi - 110037

Email address of comments is as under

- (a) gcwe.opsbr@nsg.gov.in
- (b) twoic.weops@nsg.gov.in