DRAFT REVISED QUALITATIVE REQUIREMENT (QRs) AND TRIAL DIRECTIVE (TDs) OF SUSPECT LUGGAGE CONTAINMENT VESSEL (SLCV)/ PORTABLE EXPLOSIVE CONTAINMENT SYSTEM (PECS)

Sl.No	Specification/QRs	Trial Directives (TDs)
1.	The size of PECS/SLCV (ATV along with Containment vessel) should be equal to or less than 9.5 feet (length) x 7.5 feet (height) x 6 feet (width).	(a) To be checked physically by BOO. (b) SLCV should be able to negotiate or pass through door size of 10 feet (length), 8 feet (height) x 6.5 feet (width).
2.	Internal hollow dimensions should be minimum 500mm (wide) x 700mm (high) x 1000 mm (length) with an adequately sized door.	BOO to physically check the door size by placing a box of 480mm (wide) x 680mm (height) x 980mm (long) on the extended tray then retracting the tray inside the equipment along with the box.
3.	The equipment should be able to contain 100% fragmentation effect and blast impact of minimum 3 kg TNT or equivalent (single use). However, gases may be safely vented out. There should not be any secondary fragmentation	Vendor / OEM to provide certificate from any National / International accredited lab certifying the blast sustaining capacity of equipment.
4.	When mounted on a trailer should be able to be towed by Light Motor Vehicle (LMV).	To be checked physically by BOO by driving around to see the stability with different vehicles available.
5.	It should have replaceable built-in battery with fast charging facility to operate self-propelled cart with an operational capability of min 3 hrs. It should be operated both by a tethered cable and wireless remote control. The wireless remote control should be functional at a distance of min 100 mtrs. 100 mtr tethered cable to be provided with the equipment for wired operation. One rotating (automatic or manual) disc or drum to be provided to roll & unroll the cable. Connectors to be provided if single 100m length cable not available. Wire disc or drum can be inbuilt or separately provided.	(a) To be checked physically by BOO using cable and wireless remote control minimum from 100m distance. (b) This should be demonstrated with the use of both wireless and wired tethered controls. (c) The operational capacity of 3 hrs to be checked physically by moving the vehicle continuously for the duration.

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6.	Limit sensors to be installed to detect door completely opened or completely closed.	BOO to physically check the sensor functionality by opening and closing the door 5 times.
7.	There should be a kill switch for emergency shutdown of PECS/SLCV on tethered control device and wireless remote control.	(a) To be checked physically by BOO. (b) The PECS should instantly stop moving during the door opening or closing routine when the kill switch is engaged at the PECS/SLCV and at the remote. This should be demonstrated with the use of wireless, wired (tethered) control and with switch on the device.
8.	Door can be manually opened or closed in case of power supply failure within 5 minutes.	(a) To be checked physically by BOO. (b) The vendor to provide live verification demo of the capability to open & close the door if the primary power supply fail. (Primary power supply to be switched off while testing).
9.	The turning radius should be less than 4 meters to support operations inside and outside the building.	To be checked physically by BOO
10.	Should be fitted with programmable logic control for remote opening and closing of the door by using wireless remote control or wired (tethered) control.	(a) BOO to physically check using wired (tethered) and wireless connection to demonstrate door operation (open if close and closed-if open). (b) Perform the routine five (5) times.
11.	It should be completely battery operated (without any petrol/ diesel/CNG/ LPG based engine/ generator) for operation and propelling inside and outside building, malls etc.	(a) BOO to physically check the internal battery of the PECS/SLCV. (b) It should be rechargeable batteries from the electrical power outlet. Check if the entire PECS/SLCV operations are powered from the battery (door operation and PECS/SLCV mobility). (c) No combustion engine or generator should be powering the system.

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12.	Design of PECS/SLCV should be made to allow air lifting of the said equipment as underslung.	BOO to hang the PECS/ SLCV by a crane for 15 minutes. Then the SLCV should be operated and checked. The cost of crane / arrangement of the crane shall be the responsibility of OEM/ vendor.
13.	**Trailer with Ramp**. (a) If user operational requirement necessitates trailer with ramp for transportation alongwith SLCV/PECS following are dimensions of trailer. L – 11' ± 10% W – 9' ± 10% (b) Ground clearance ≥ 1 ft. (c) Weight of trailer should not exceed 1 Ton. (d) It should be 4 wheeled with reliable suspension system. (e) Trailer should have effective braking system.	(a) To be physically checked by BOO by loading and unloading PECS/ SLCV into a vehicle. (b) Ramp should not bend permanently or crack while loading & unloading.
14.	(a) Fixed/Variable speed control and braking system to be provided on wired/wireless remotes for controlled navigation. (b) Slope climb assist braking/ hill climb assist braking to be provided to navigate slopes upto 10 degrees gradient using remote control. (c) PECS/ SLCV should also have obstacle avoidance system to include camera and sensors to be integrated for safe remote operation.	To be physically checked by BOO by loading and unloading PECS/ SLCV into a vehicle. Ramp with Suitable gradient to be provided by the OEM/vendor for testing.

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15.	Maintenance and cleaning tools to be provided with the eqpt. Two spare tyres along with Jack (Mechanical and hydraulic) to be provided with equipment.	(a) BOO to check physically. (b) Maintenance and cleaning tools to be provided along with list.
16.	Total weight of the PECS/SLCV should be less than or equal to 2500kg excluding ramp and trailer.	(a) BOO to check physically. (b) Additionally, OEM to provide certificate from any national/ international accredited lab.
17.	User manual in English and Hindi language be provided with the equipment.	To be checked by Board of Officers.

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