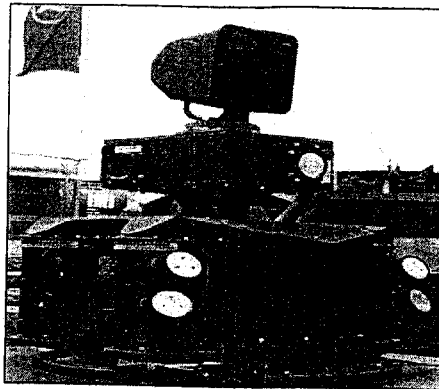


**CASE BRIEF : AFV PROTECTION AND COUNTER
MEASURE AS A MAKE-II PROJECT**

1. **Project Requirement.** A requirement has been felt to acquire a Active Protection System capable of not only detecting an ensuing attack but also defeating it, thereby enhancing own survivability.



2. **Key Technology Involved.**

(a) **Soft Kill.**

- (i) Uses jamming to confuse in coming missiles.
- (ii) Uses decoys, smoke, electro-optical sigs, IR or Laser for jamming.

(b) **Hard Kill.**

- (i) Attempts to detect & destroy incoming projectile.
- (ii) Uses sensors to detect eg. MMW radar.
- (iii) Uses counter measures like fragmentation charges, steel bars, high pressure shock waves to destroy the projectile.

3. **Broad Operational Requirement.**

(a) The system should deflect or destroy hostile attacks to protect against threats from guided missiles, RPG/RL and projectiles fired at high velocity.

(b) The system should have provision for future upgrades to degrade KE projectiles.

(c) It should provide protection against each type of ammunition as under:-

- (i) RPG/ RL.
- (ii) ATGM
- (iii) HEAT round from 125mm tank gun.

- (d) Should function when static or on the move and should be capable of all weather, day and night operations.
- (e) Should give warning when lased on by incorporation of laser warning devices.
- (f) Should provide a protective arc in azimuth and in elevation.
- (g) Should be capable of detecting more than one direction of attack in case near simultaneous hostile threat and neutralise up to two threats.
- (h) Should have multi launcher capability/ auto loading to address threats from different direction simultaneously.
- (j) The fitting of the system should not affect sealing of combat vehicle for deep fording and NBC protection.
- (k) The system should be capable of continuous operation for at least eight hours.
- (l) The system should have high safety against accidental activation and the dangerous zone for dismounted troops operating in the vicinity.
- (m) The operating voltage of the system should be compatible with tank batteries.
- (n) Should be light in weight and complete weight should be less than 1000 kg.

4. **Broad Timelines.**

- (a) Devp/ Production - 2022.
- (b) Delivery - In phased manner post production.

5. **Assistance Available for Vendor from Line Dtees during the D&D Phase.**

- (a) Access to the equipment.
- (b) Inputs during D&D phase.
- (c) Field fire ranges for trial.

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