**Effectors for Anti-Torpedo Countermeasure System**

1. **Brief Description/ Technical Details.** Effectors are active self-propelled decoys launched from underwater platforms designed to simulate a target consisting of an acoustic head operating in active or passive mode. In active mode, it performs deceiving actions against an incoming threat by simulating the presence of a target and in passive mode it radiates noise. The anti-torpedo countermeasure system held with the Indian Navy is designed for submarine defence and counter the threat posed by active/passive homing torpedo and provides high escaping probability of the threatened vessel. Effectors should comprise of the following sub-assemblies:-

(a) **Acoustic Section**. It should consist of a transducer, electronic circuits, power amplifier and Shell.

(b) **Battery Section**. It should supply power to the electronics and propulsion system with high power density and reliability even after a long storage period.

(c) **Electronic Section**. It should have signal processing circuits with integrated guidance sensors, supply generation and regulating electronics and pre-setting electronics.

(d) **After Body Section**. It should comprise of shell, rudders/tail, servo motors, propulsion motor and stablising ring.

(e) **Towed Hydrophone Assembly**. It should be capable of receiving acoustic signals from the incoming threat and should have stablising fins.

(f) **Dispenser**. It should be capable of being released immediately after launch to stablise the effector before initiation of propulsion motor.

2. **Tentative** **Quantity.** 174 Effectors required for five years.

3. **Tentative Timelines for Development/Production**. Two- three years