TECHNOLOGY DEVELOPMENT FUND (TDF) SCHEME

TITLE: DEVELOPMENT OF INDIGENOUS DYNAMIC POSITIONING SYSTEM FOR MINE COUNTER MEASURE VESSEL (MCMV)

1. **Description**: Indigenous Dynamic Positioning (DP) System for Mine Counter Measure Vessel (MCMV) is based on a dynamic positioning system technology area with the objective of developing indigenous DP system for use on Naval platform. This indigenous DP system post development, can be retrofitted on MCMV for technology demonstration and can also be considered for installation in future Naval platforms.

   Globally, the foreign navies have identified application of the system onboard research ships, offshore patrol vessels and underwater platform support vessels to assist in specific operations where precise station keeping or maneuverability is crucial. It is envisaged for extensive use of the system onboard future Naval platforms. Indigenous development of the DP system will obviate the delimitation and enable develop captive expertise.

2. **Functional and Operational requirements:** The DP system should automatically maintain the position of the ship by the means of thruster force to ensure precise station keeping and maneuverability. It is to be designed to posses a certain level of station keeping capability, reliability and redundancy. The system addresses the reliability based on the redundancy and for tolerance of DP system. The DP system is to include an automatic DP system and a manual position control system. The station keeping capability is normally defined and presented by the limiting environmental conditions under which the ship can maintain the position and heading, both in intact and post worst-case failure conditions. The limiting environmental conditions and operational modes for a DP vessel are to be defined as per the class. DP system is to be able to maintain position and heading under specified environmental conditions with the thrusters intact.

--End of Document--

TECHNOLOGY DEVELOPMENT FUND (TDF) SCHEME

FEASIBILITY CUM RFI RESPONSE FOR THE PROJECT REQUIREMENT UNDER TDF SCHEME

(PROFROMA)

1. **Name of the Institute** (Industry/Academia):
2. **Contact details:**
    a. Email
    b. PoC
    c. Address
3. **Title of the project requirement:**
4. **Project Description** (Define broad understanding of the project requirement and proposed solution under the project).
5. **Briefly detail the proposed technical solution in terms of subsystem/submodule levels.**
6. **Road map for achieving the proposed outcome (Development Plan Phase wise -Max 5 phases).**
7. **Development and production Estimates:**
    i. Estimated time required for development of the proposed technology /product (In Months).
    ii. Estimated cost required for the for development of the proposed technology /product (BQs of submodules/subsystems if any pls attach).
    iii. Estimated production cost of the end product after successful development (per unit or batch cost).
    iv. Whether the industry has already done any Suo moto design and development of the proposed product/technology at Technology Readiness Level – Yes/No
    v. Details of Suo moto design and development done if marked Yes in previous question (within 250 words).
    vi. Essential infrastructure required for development of the proposed product/technology for which funding is required.
8. **Technical strength in terms of manpower.**
9. **Relevant Work Experience.**
10. **Any other relevant information**

Queries if any and the reply in **PDF FORMAT** to be submitted online addressing to;

TO,

THE DIRECTOR TDF, DRDO

DRDO BHAWAN, RAJAJI MARG, NEW DELHI 110011

Email to, arjunk.hqr@gov.in, CC to dir.tdf-drdo@gov.in,