

Payload electronics and SAM System for UAV Launched Precision Guided Missile V2
(ULPGM-V2)

I. PAYLOAD ELECTRONICS SYSTEM

Introduction

The payload electronics under consideration is a micro controller based intelligent system which is interfaced with day/night seeker system (EO), RF communication transceiver, Control unit, Aerial Platform, as well as manages the V2 missile Power on-board. Its configuration consists of two electronic boards which are electrically interfaced with rest of the missile. The MCU based board (mother-board) transmit and receive commands. The payload mother-board will have number of independent sensors/logic's on-board to perform the desired operations with EO and SAM electronics.

Payload Modules comprises of following: -

- a. Power Electronics Board
- b. Release Sense & Safe-Arming Unit
- c. RF Electronics & Wireless transceiver Board
- d. Mother-Board Electronics

II. SAM ELECTRONICS SYSTEM

Missile safety and operational effectiveness are closely linked to the way the explosive warhead is initiated. Modern munitions demand enhanced safety over the complete logistical and tactical cycles. SAM is equipped with three safeties namely, ARM, CHARGE and FIRE. It operates only on getting or generating specific input based on various events or timings of flight trajectory. The interlocks are bound to minimum three totally independent physical or time events of flight trajectory of missile. The health of SAM can be ascertained during its operational lifetime without compromising safety.

III. Terms and Conditions for EOI

- a. Documents to be submitted with EoI. The company must provide details about company and documents in support of their claim. Any additional documents as required by DRDO shall be sought based on request received from the interested industries.
- b. The industry should essentially have experience in fabrication and qualification of on-board electronics/ similar system.

- c. The Industry should also have skilled manpower, established quality control team, willingness and capability to setup specialized infrastructure (Load test facilities, FRA, Recorder, Power Supplies etc).
- d. The Other Terms and conditions for industry seeking ToT are as per the 'DRDO Policy and Procedures for ToT' for Category 'A'.

Interested Industries are requested to forward their Expression of Interest (EoI) to Director TBRL, Chandigarh with a copy to Director DIITM, DRDO HQ on following address: -

To,

Director
Terminal Ballistic Research Laboratory (TBRL)
Sector-30
Chandigarh-160030
Phone: 0172-2307100, 2657674
Fax: 0172-2657506

Email ID: **director [dot]tbrl[at]gov[dot]in**

Copy to

Director
Directorate of Industry Interface & Technology Management (DIITM)
Room No. 447, DRDO Bhawan, DRDO HQrs, Rajaji Marg, New Delhi-110011
Phone: 011-23013209/23015291
Fax: 011-23793008

Email: **diitm[dot]hqr[at]gov[dot]in**

Industries are requested to enclose supporting document with EoI as per Appendix 'D' of DRDO Policy and Procedure for ToT available at <https://www.drdo.gov.in/sites/default/files/inline-files/drdo%20Policy%20%26%20Procedure%20%20for%20ToT.pdf>