

भारत सरकार/GOVERNMENT OF INDIA
अंतरिक्ष विभाग/DEPARTMENT OF SPACE
द्रव नोदन प्रणाली केंद्र/LIQUID PROPULSION SYSTEMS CENTRE
वलियमला, तिरुवनंतपुरम - 695 547
VALIAMALA, THIRUVANANTHAPURAM – 695 547

TR30 2025041648

02.04.2026

DISSEMINATION OF ADDITIONAL INFORMATION

With reference to the invitation for EOI for **Development, Qualification and Delivery of Flight Units of Power Processing and Control Unit for Small & Micro Satellites [EOI No. TR30 2025041648]**, please see the following pages for additional information.

हस्ताक्षरित/Sd/-
प्रधान, क्रय व भंडार
HEAD, PURCHASE & STORES

Development, Qualification and Delivery of Flight Units of Power Processing & Control Units for Small & Micro Satellites- Invitation for EoI

ADDITIONAL INFORMATION

Sl. No	Queries/Doubts posted by Bidders	Clarifications provided
1	Whether Bill of materials (BOM)/ Components list will be provided by LPSC?	Yes. Components list will be provided by LPSC. Procurement of components is the responsibility of the vendor. Procurement shall be from OEM or authorised distributors only.
2	Whether MIL components can be used?	Space CoTs components with MIL temperature rating and 30k radiation tolerance are used. In addition CoTs components having reliability data from OEM only used.
3	Whether screening is required?	Screening is required. Guideline for screening will be provided, by LPSC
4	Any Engineering model realized in LPSC?	Engineering model (EM) of PPCU with space grade components is realized. The production through industry is planned with space CoTs components, for which EM is to be realized by the industry, including PCB design, chassis design, thermal & structural analysis and software development. The development of automated system for the qualification & acceptance testing also by the party.
5	Whether thermal analysis will be done by LPSC?	No. Thermal analysis is the responsibility of the party. LPSC will provide guidance for thermal analysis.
6	Whether RFP will be floated?	RFP with relevant technical and commercial specification will be floated.
7	Any specific test setup is required for card level & package level tests	The modules to be realized and tested are dc-dc converters which work with an input voltage of 28V to 42V. Testing includes tests with Resistive load under various test conditions including environmental. No special test equipment is required for testing. For the integrated test with thrusters & feed system, LPSC facility support will be provided.
8	Whether software design is by the party?	The software design is by the party.
9	Whether test plan will be provided by LPSC?	Yes. Test plan with all the test details will be provided. Test procedure need to be prepared by the party
10	Whether mechanical design, structural analysis is by party?	Yes. Guidance will be provided by LPSC.
11	Size & weight of the package?	The dimension of existing engineering model with space grade components is 240x230x120mm ³ with a mass of 1.5Kg. But with CoTs components, size and mass need to be reduced.

12	Total no. of sets to be realized?	20 flight sets. The Engineering model & Qualification model are to be realized and cleared by LPSC before starting flight module realization. At least 2 sets of EM and QM are planned to take care of design iterations.
13	Warranty asked is 36 months. Whether it can be revised as PBG will be on hold for 36 months even after delivery of the items?	The warranty of 36 months is asked for the functional performance of the package for minimum 3 years after delivery. The warranty can be revised to 12 months.
14	End use certificate from ISRO may be required for components procurement by party.	It can be provided.
15	Whether document is required for Non-disclosure agreement (NDA)?	NDA to be executed on INR 100 stamp paper.
16	Any further documents as part of EOI?	For EOI, no further documents will be provided. All the relevant details will be submitted along with RFP.
17	Payment terms	Maximum 30% of the order value exclusive of applicable GST as advance against bank guarantee for equal amount. Balance amount will be dispersed on pro rata basis after delivery.

Apart from above queries, parties asked for relaxing the delivery schedule in view of the lead time required for procurement of components. Also parties requested to offer order to multiple parties. As it involves design and the total no. of packages to be delivered are less, it is preferred to go ahead with single party. The delivery schedule is revised as follows.

1. Placement of purchase order with schematic and part list- T0
2. Completion of schematics, Layout & chassis design - T0 + 3 months
3. PCB & chassis Fabrication- T0 + 4 months
4. Procurement of components - T0 + 6 months
5. PCB wiring - T0 + 7 months
6. Engineering model readiness including card level & package level functional testing- T0+9 months
7. Review & clearance for QM realization - T1
8. QM realization & qualification - T1 + 3 months
9. Review and clearance for FM realisation- T2
10. Delivery of first flight package- T2 + 3months
11. Delivery of subsequent flight packages - in 2 months' interval

