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**Council of Scientific and Industrial Research
NATIONAL AEROSPACE LABORATORIES**

PB No.1779, HAL Airport Road, Kodihalli, Bangalore – 560017, India
Phone: +91-80-25086040/6041 Fax: +91-80-25269611
Email: purchasek@nal.res.in

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ADDENDUM

Tender No. NAL/PUR/ALD/092/18-Z

Tender ID: 2019_CSIR_430829_1 Dated 26-Apr-2019

In continuation of CSIR-National Aerospace Laboratories Tender No. NAL/PUR/ALD/092/18-Z Dated 26-Apr-2019 for “**Procurement of Avionics System of the Aircraft**”, the additional information/clarification may be read as under: -

Clause No.	Query	Additional information /clarification
1	Will NAL provide time for development of the same products listed in EOI or NAL is expecting participation by companies that are ready with certified products under the category	The Objective as mentioned in EOI is repeated here for your convenience: OBJECTIVE The objective of this EOI is to select suitable Bidders for providing the complete avionics suite already installed and civil certified on any FAR 23 certified Aircraft.
2	The type of the aircraft, whether it is presently in the conceptual stage, or a prototype already exists.	This EOI is for 19 seater aircraft. NAL has already designed and built 14 seater civil aircraft which is under flight tests. Hence the proposed aircraft will be extended version of 14 seater for 19 seater capacity. This means the working aircraft prototype is already available.
3	If it already exists, what is the model name/ number and certification status	It is called SARAS PT1N and is under flight tests for certification
4	Is it with single engine or double engine (engine model)	Double Engine
5	Propulsion (propeller or jet)	Propeller
6	Landing Gear	To be designed for 19 seater capacity
7	High wing or low wing	Low Wing
8	Space available for Avionics LRUs	Prototype have two avionics bays (Left and Right) in the nose section, where we have already integrated complete avionics suite for FAR 23 category.

Clause No.	Query	Additional information /clarification
9	Electric power (Generation, Storage Control & Distribution with respective Power ratings)	28 V DC volts operated systems supported by Primary, Secondary and Emergency bus. The electrical source is from two Generators (one each from engine).
10	Skin Mapping for location of antennas	NAL will take care of the location mapping
11	Type of skin (all metal or composite)	Metal
12	Single or Dual Communication & Navigation System (specify which would be dual)	Dual Communication & Navigation System
13	Legacy Main Instruments Panel (MIP)/ consoles or Glass cockpit	No New Design
14	Type of Autopilot	To be proposed by vendor
15	We have to prepare a work plan to execute the program. The EOI calls out that supplier will provide support. We need clarity on what level of support is expected for the integration effect.	Technical support required for all the systems supplied by Vendor interns of ICD, manuals and any technical query to be cleared while NAL is integrating the systems at NAL.
16	Who will be responsible for the final design configuration of the system? For Example, who will decide where LRUs are mounted in the aircraft? Who makes that decision?	NAL will integrate the LRUs on the aircraft and do the required tests for clearances. However the vendor who supplied the systems are required to extend their (including OEM) support during such integration and tests.
17	Who will do the final aircraft wiring diagrams?	NAL will be responsible to do the wiring on aircraft (in turn NAL may outsource or may carryout internally)
18	Who will be responsible for the physical installation of the system and harnesses?	NAL will be responsible and will take care.
19	Who is the airworthiness authority during flight test.	CEMILAC in the beginning and later by DGCA
20	Will NAL provide test Pilots?	NAL will take care of complete flight testing
21	Can there be 4-5 progressive milestone payments for NRE?	This will be taken-up during tendering stage.

Other clauses of the bidding document remain unchanged.

**Sd/-
Stores & Purchase Officer**