

Tender Id: 2022\_CSIR\_196217\_1

**PROCEEDINGS OF THE PRE-BID CONFERENCE HELD ON 10<sup>th</sup> JUNE 2024  
THROUGH WEBEX TOWARDS SUPPLY OF FAR-23 CERTIFIED PILOT AND CO-  
PILOT SEAT**

The Pre-bid Conference was held and the following T&PC members attended the meeting: -




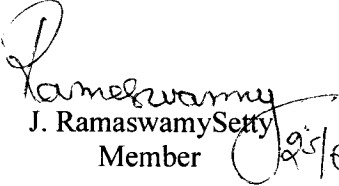
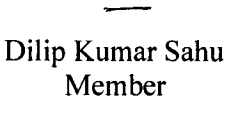
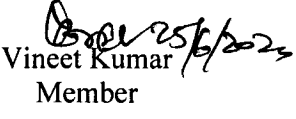
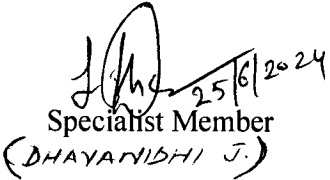
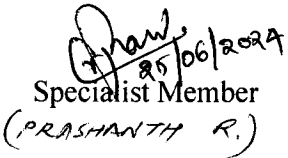
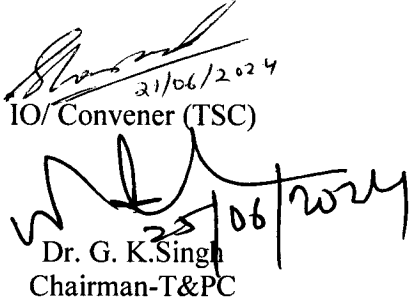
Sl.No.	Name & Designation		Role
1	Dr. G. K. Singh	Chief Scientist	Chairman
2	Mr. RamaswamySetty J	Chief Scientist	Member
3	Mr. Dilip Kumar Sahu	Sr.Technical Officer-3	Member
4	Mr. Vineet Kumar	Chief Scientist	PD-SARAS Member
5	Mr. Dhayanidhi J	Chief Scientist	Specialist Member
6	Mr. Prashanth R	Sr. Pr. Scientist	Specialist Member
7	Mr. Sharad Kumar	Pr. Scientist	Member - Convener (TSC)
8	COA or his/her representative		Member
9	COFA or his/her representative		Member
10	CoSP or his representative		Convener (T&PC)

The list of Prospective bidders who attended the Pre-bid Conference is as per **Annexure-I**.

At the outset, the Chairman welcomed all the Members and the representatives of the Bidders and briefed in general the scope of the Project. The Indenting Officer to read out the clarification sought by the bidders and the replied thereto as detailed in **Annexure-II(Part A: Technical Clarification and Part B: Commercial Clarification, if any)**.

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the CPP portal/website of CSIR-NAL and all prospective bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before formulating and submitting their bids as stipulated in bidding Documents.

The meeting ended with a vote of thanks to the Chair.

 CoSP Convener-TPC	 CoFA Member-Finance & Accounts	 AO Member- Admin
 J. RamaswamySetty J Member	 Dilip Kumar Sahu Member	 Vineet Kumar Member
 Specialist Member (DHAYANIDHI J.)	 Specialist Member (PRASHANTH R.)	 IO/ Convener (TSC) Dr. G. K. Singh Chairman-T&PC

**CSIR-NATIONAL AEROSPACE LABORATORIES  
BENGALURU - 560 017**

TENDER ID: 2022-CSIR-196217-1

ANNEXURE - I

TENDER NO.: NAL/PUR/179/23

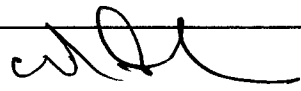
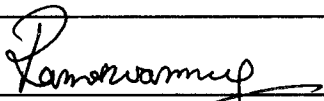
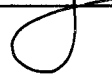
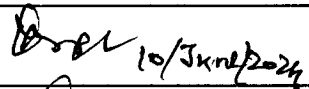
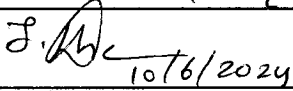
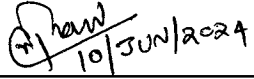
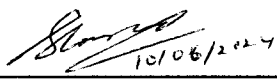

DATE & TIME: 12:30 pm / 10/06/2024

VENUE: STTD THROUGH WEBEX

(Conference HALL)

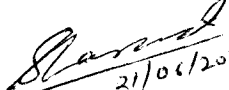
Pre-Bid Conference for ..... SUPPLY OF FAR-23 (CERTIFIED) PILOT & CO-PILOT SEATS .....

**ATTENDANCE SHEET - T&PC MEMBERS**

Sl. No.	Name		Signature
1	Dr. G. K.Singh	Chairman	
2	Mr. J. Ramaswamy Setty	Member	
3	Mr. Dilip Kumar Sahu	Member	- 
4	Mr. Vineet Kumar	PD-SARAS Member	 10/JUNE/2024
5	J. Dhayanndhi	Specialist-Member	 10/6/2024
6	PRASHANTH .R	Specialist-Member/TFL	 10/JUN/2024
7	Mr. SHARAD KUMAR	Indentor-Convenor -TSC	 10/06/2024
8	COFA or his/her representative	Member	-
9	COA or his/her representative	Member	-
10	CoSP or his representative	Convenor (T&PC)	 10/06/2024

## List of bidders who attended the Pre-bid Conference

Sl. No.	Company	Representatives
1	AEROCHAMP	Dr. Praveen Srivastav
2	ISRAEL AEROSPACE INDUSTRIES (IAI)	Mr. Rahamim Naman, Mr. Ronen, Mr. Avraham Orenstein and Mr. Sharon
3	KRISHNA ENGINEERING	Mr. Nirmal
4	MICRONEL GLOBAL ENGINEERS	Mr. Lakshman and Ms. Priya
5	MTAR	Mr. Arun Krishna and Mr. Rohit Khera
6	TIMETOOTH	Mr. Girish, Mr. Imran and Ms. Janhavi Nene

  
21/06/2024  
Signature of Indentor

**CSIR-NATIONAL AEROSPACE LABORATORIES  
BENGALURU**

**PART A: TECHNICAL QUERIES & CLARIFICATION**

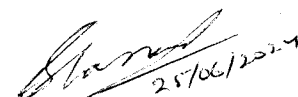
**Tender Id** : 2022\_CSIR\_196217\_1

**Tender No.** : NAL/PUR/STTD/179/23

**Item Description** : SUPPLY OF FAR-23 CERTIFIED PILOT AND CO-PILOT SEAT

Sl. No.	Query / Clarification Sought	Clarification/Amendment
1	The product the bidder may offer is certified under TSO127a and RTCA DO160D. However, the tender document specifies that the required certifications are TSO127b or latest and DO160G or equivalent. Could you please clarify if re-certification of the product to the latest standards is necessary?	<p>Most test details in DO-160G are similar to those in DO-160D. Therefore, at the time of bid submission, the bidder may note that the test requirements for a specific point in section 4.2.2.5 are the same as those for DO-160D, for which the product is already qualified. The bidder must conduct a study to make this remark. If any requirement differs between DO-160G and DO-160D, the bidder should provide appropriate references, which will be considered during bid evaluation.</p> <p>The primary intention is to ensure the product meets the specifications in the tender. However, if the bidder's product is qualified to a different standard, they should identify relevant gaps as part of the bid to aid in evaluation. The bidder should refer to the note at the end of section 4.2.2.5, stating that applicability of environmental qualifications by analysis and/or similarity, provided the basis and justification are included in the technical bid. If analysis/similarity is claimed, details of the previous part number that passed the actual test also must be provided.</p>
2	We have a seat that is fully certified for TSO127a. There are slight differences between TSO127a and TSO127b or TSO127c. Does NAL require these products to undergo re-certification tests? Also, should the seats be approved under FAA or CEMILAC? Please comment.	The tender document is very clear in this regard - Seats shall be certified in accordance with FAR 23.561, FAR 23.562 and FAR 23.785 or equivalent EASA / CAA / DGCA (India) certification requirement approved according to TSO127b or latest.
3	If we develop a pilot seat, will NAL allow us to use their facilities to carry out the dynamic tests?	This query is beyond the scope of the present tender.
4	In the bidder compliance chart (Table 5), there are some empty lines which are not relevant as per the tender document. Please can you recheck and confirm this?	The bidder compliance chart ( <b>Table 5</b> ) appearing in Chapter 4 is <b>revised</b> after Pre-Bid Conference.

5	In section 4.3.3.1, in bidder responsibility, there is a mention of NAL sharing the cockpit model of the aircraft which is not done as yet. Please comment.	This section comes into relevance once the bidder is finalized and the purchase order is issued then NAL will share cockpit model for the vendor to conduct suitability studies.
6	Does NAL require manual or powered Seat Horizontal Travel, Seat Vertical Travel, and Adjustable Seat Recline?	While the selection of the lever mechanism is up to the vendor, there is no provision for the supply of either electrical power or pneumatic/hydraulic power for this purpose from the aircraft's side.
7	Details of seat rails interface will be provided?	Details of the seat rails interfacing the aircraft structure will be provided by CSIR-NAL.
8	In one instance, it is mentioned that an NDA is required to exchange technical data, such as CAD drawings (refer to section 4.3.1). However, the tender document states that an NDA is not required. Could you please clarify this?	The requirement for an NDA depends on the sensitivity of the data being shared. High-fidelity data will require an NDA for exchange. For example, NAL is willing to share a de-featured version of the cockpit for the vendor to conduct a packaging study for the seats, which does not require an NDA prior to submission of Bids. However, if more clarity of the geometric features is sought by the bidder after the Purchase Order is issued, an NDA must be in place for any such exchanges. <b>Note: Post pre-bid conference 4.2.4.xii is revised to – "For seat design suitability check, low fidelity 3D CAD model of cockpit will be shared by NAL on request basis."</b>
9	We are already a DGCA-certified design firm, but we have not yet developed a pilot seat. However, we intend to develop one. Can we still participate in this bid?	If you can satisfy the Bidder qualification criteria as in Chapter 6 and can satisfy the technical specifications within the stipulated time as per tender document, you can participate in the bid.
10	The timelines in the tender document may not accommodate developmental activities. Hence, more time should be allowed in Delivery schedule, up to 18 months	The tender document is explicit in its requirement: the supply of FAR-23 certified pilot and co-pilot seats. However, it neither states that the design and development must be fresh for the NAL tender nor does it prohibit such an approach. The bidder has the flexibility to explore both options.
11	We are also a DGCA approved seat manufacturer, we would also request final deliverable schedule to be T <sub>0</sub> + 24 months.	Since, this point is raised by couple of other bidders, the delivery schedule for supply of documents is <b>extended</b> to T <sub>0</sub> + 6 months. The Delivery Schedule of the item delivery is extended to T <sub>0</sub> +15 months. <b>Refer section 4.6 of Chapter 4</b> revised after Pre-Bid Conference. <b>Note: T<sub>0</sub> is the date of release of purchase order</b>

  
25/06/2024  
Signature of Indentor

  
26/6/24  
Signature of Project Leader

4.6 Delivery Schedule (including supply & acceptance) (Revised after pre-bid conference)

Delivery of the Item		Training At CSIR_NAL or Video Conferencing	Acceptance of the item
Days/ Weeks/Months	Location	Days/ Weeks/Mont hs from the date of receipt of item	Days/ Weeks/ Months from the date of receipt of item
Supply of technical documentation of Pilot and Co-Pilot seats as mentioned in section 4.2.5 along with relevant TSO Certification from FAA / EASA /CAA / DGCA (India)	T <sub>0</sub> +6m onths CSIR-NAL, Bangalore	-	-
Deliverable as per section 4.2.4, 3 numbers of Pilot and 3 numbers of Co-Pilot seats along with seat rails	T <sub>0</sub> +15 months CSIR-NAL, Bangalore	1 day	1 Month

Note: T<sub>0</sub> is the time of release of Purchase Order (PO)

*[Signature]*  
25/6/2024

*[Signature]* 26/6/24  
(Network Controller)

**Table 5: Bidder Compliance Chart (Revised after pre-bid conference)**

CHAPTER-4			
Section No	Section	Bidder Compliance	Remarks (if any)
4.1	End Use: Saras Mk II Aircraft		
4.2.1	Specification of Pilot and Co-Pilot seats		
4.2.1.1			
4.2.1.2			
4.2.1.3			
4.2.1.4			
Figure 1	Cockpit footprint (cross section and plan form)		
Figure 2	Pilot, Co-pilot seat cockpit environment		
4.2.1.5			
4.2.1.6			
4.2.1.7			
4.2.1.8			
4.2.1.9			
4.2.1.10			
4.2.1.11			
4.2.1.12			
4.2.1.13			
4.2.2	Requirements of Pilot and Co-pilot seats		
4.2.2.1	Static Loads Requirements		
4.2.2.2	Dynamic Loads Compliance		
4.2.2.3	Restraint system Test		
4.2.2.4	Flammability Test		
4.2.2.5	Environmental Qualification Tests		
4.2.3	Maintainability, Reliability and Product Support		
4.2.4	List of Deliverables		
4.2.4.1			
4.2.4.2			
4.2.4.3			
4.2.4.4			
4.2.5	List of Documentation		
4.2.5.1			
4.2.5.2			
4.2.5.3			
4.2.5.4			
4.2.5.5			
4.2.5.6			
4.2.5.7			
4.2.5.8			
4.2.5.9			
4.3	Scope of Supply and incidental works:		
4.3.1			
4.3.1.1			
4.3.1.2			
4.3.1.3			
4.3.1.4			
4.3.1.5			
4.3.2	CSIR-NAL Responsibilities		
4.3.3	Bidder Responsibilities		
4.4	Inspection & Tests		
4.4.1	General		
4.4.1.1			
4.4.1.2			
4.4.1.3			

*Handwritten signature*  
25/06/2024

4.4.1.4			
4.4.1.5			
4.4.1.6			
4.4.1.7			
4.4.1.8			
4.4.1.9			
4.4.1.10			
4.4.1.11			
4.4.2	Manufacturer's Inspection Certificate		
4.4.3	Acceptance Tests		
4.4.4	Training		
4.5	Incidental Services On site Comprehensive Warranty:		
4.6	Delivery Schedule (including supply and acceptance)		
<b>CHAPTER -6</b>			
6.1	Eligibility Criteria		
6.1.a			
6.1.b			
6.2	Capability- Equipment & manufacturing Facilities		
6.3	Financial Qualification Criteria		
6.3.a			
6.3.b			

Note: Bidder to give compliance for all The sections of Chapter 4 and chapter 6. However in Table 5 lengthier clauses are omitted for lack of space.

*Shasad*  
25/6/2024

*ll ll*  
26/6/24



**CSIR-NATIONAL AEROSPACE LABORATORIES**  
**BENGALURU**

**PART B: COMMERCIAL QUERIES & CLARIFICATION**

**Tender Id** : 2022\_CSIR\_196217\_1

**Tender No.** : NAL/PUR/STTD/179/23

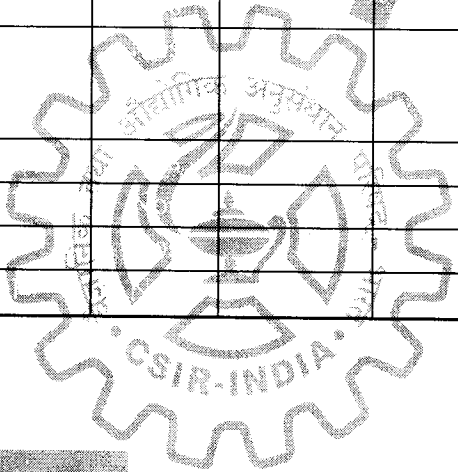
**Item Description** : SUPPLY OF FAR-23 CERTIFIED PILOT AND CO-PILOT SEAT

Sl. No.	Query / Clarification Sought	Clarification/Amendment
1	If we have a joint venture with another firm who have developed seats elsewhere (other country/countries) and we bring him onboard, do we qualify as a bidder as a JV firm?	Chapter 6 of the tender provides the provision to have a partner or establish a Joint Venture; however, relevant paperwork should be submitted as part of the technical bid, clearly stating the extent, scope, and permissions of both the partners/firms involved. It should be noted that since this is an open tender, the Government of India stipulates that a minimum of 20% indigenous content is mandatory.
2	Would there be any preference for a firm which has over 80% of indigenous content?	No preference for a bidder. However, separate provisions are available for Class-I and Class-II suppliers as per government stipulations.
3	Is there any custom duty exemption provided by NAL for the products which are imported?	Since this is an Open Tender, there is no custom duty exemption.
4	In case there is a situation that the tender attracts any sort of NRC, there is no relevant line for such an entry in the BOQ. Please clarify.	<ol style="list-style-type: none"> <li>1. Bidders are required to quote as per the table appended below in PDF format.</li> <li>2. The price-bid submitted in the PDF format will be considered for financial evaluation.</li> <li>3. NRC or any additional charges can be quoted in item no. 5 of the attached PDF format.</li> <li>4. Further, as the BOQ to be completed in the portal, the value against the requirement may be mentioned as zero to complete the BOQ process through online submission.</li> </ol>

  
 Stores and Purchase Officer

## PRICE BID / BOQ

Sl. No.	Item Description	Quantity	Units	Price per Unit	GST	Total Cost
1	Supply of certified Pilot seat with seat rails	3	Nos			
2	Supply of certified Co-Pilot seat with seat rails	3	Nos			
3	Supply of spare pair of seat rails	4	Set			
4	Supply of qualification documentation as per 4.2.5	1	Nos			
5	Other charges, if any					
6	<b>Sub-Total</b>					
7	<b>Less: Discount (if any)</b>					
8	<b>Sub-Total:Net Ex-Works Price</b>					
9	<b>Add: Packing &amp; Forwarding charges (if any)</b>					
10	<b>Add: Transportation Charges (if any)</b>					
11	<b>Add: Insurance charges (from warehouse-to-warehouse) (if any)</b>					
12	<b>Total (A):</b>					
13	<b>Installation &amp; Commissioning charges (if any)</b>					
14	<b>Training charges (if any)</b>					
15	<b>Total (B):</b>					
16	<b>Bank Charges, if any</b>					
17	<b>Total (C):</b>					



Stores and Purchase Officer