

Tender Id: 2025\_CSIR\_236570\_1

**PROCEEDINGS OF THE PRE-BID CONFERENCE HELD ON 16<sup>th</sup> June 2025**  
**THROUGH WEBEX TOWARDS SUPPLY OF FAR-23 CERTIFIED PILOT AND CO-PILOT SEAT FOR SARAS MK II.**

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

Sl. No.	Name & Designation		Role
1	Dr. G. Balamurugan	Chief Scientist	Chairman
2	Dr. Achuthan C Pankaj	Chief Scientist	Alt. Chairman/Member
3	Mr. J Dhayanidhi	Chief Scientist	Member
4	Ms. Rashmi Hundekari	Chief Scientist	PD-SARAS Member
5	Mr. Prashanth R	Sr. Pr. Scientist	Specialist Member
6	Mr. Sharad Kumar	Sr. Pr. Scientist	Member - Convener (TSC)

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 reply there to as detailed in **Annexure-II (Part A: Technical Clarification and Part B: Commercial Clarification, if any)**.

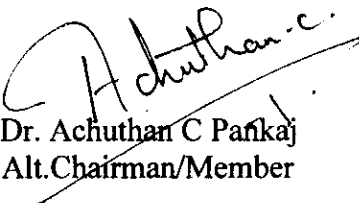
The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the CPP portal/website of CSIR-NAL and all prospective bidders are required to take cognizance of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

  
Sr. CoSP / CoSP  
Convener-TPC

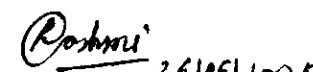
  
CoF  
Member-Finance & Accounts


  
Sr. CoA / CoA  
Member- Admin

  
Dr. Achuthan C Pankaj  
Alt. Chairman/Member

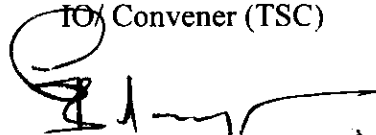
  
Mr. J Dhayanidhi  
Member

Mr. Dilip Kumar Sahu  
Member

  
Ms. Rashmi Hundekari  
PD-SARAS Member

  
Mr. Prashanth R  
Specialist Member

  
Sharad Kumar  
IO/ Convener (TSC)

  
Dr. G. Balamurugan  
Chairman-T&PC


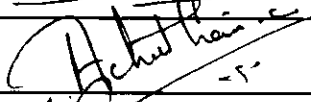

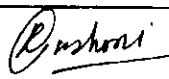


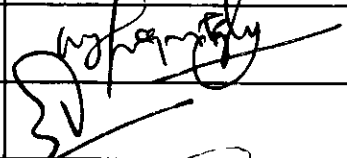
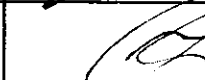

**CSIR-NATIONAL AEROSPACE LABORATORIES  
BENGALURU - 560 017**

TENDER ID: 2025-CSIR-236570-1  
TENDER NO.: NAL/PAUR/STTD/1179/23(G)  
DATE & TIME: 16/06/2025 @ 11:00 AM (IST)  
VENUE: SARAS PROJECT OFFICE THROUGH WEBEX

ANNEXURE - I

Pre-Bid Conference for SUPPLY OF FAR 23 CERTIFIED PILOT & CO-PILOT SEATS  
FOR SARAS MK II

**ATTENDANCE SHEET - T&PC MEMBERS**

Sl. No.	Name		Signature
1	Dr. G. Balamurugan	Chairman	
2	Dr. Achuthan C Pankaj	Alt. Chairman/Member	
3	Mr. J Dhayanidhi	Member	
4	Mr. Dilip Kumar Sahu	Member	
5	Ms. Rashmi Hundekari	PD-SARAS	
6	Mr. Sharad Kumar	Indentor-Convenor -TSC	
7		Specialist Member	
8	PRASHANTH R	Specialist Member	
9	COFA or his/her representative	Member	
10	Sr. CoA / COA or his/her representative	Member	
11	Sr. CoSP / CoSP or his representative	Convenor (T&PC)	

**CSIR-NATIONAL AEROSPACE LABORATORIES  
BENGALURU**

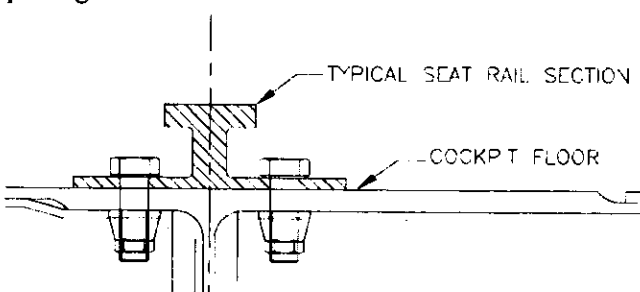
**TECHNICAL QUERIES & CLARIFICATION**

**Tender Id : 2025\_CSIR\_236570\_1**

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


**Item Description: Supply of FAR-23 certified Pilot and Co-Pilot Seat for the Saras Mk II**

**Date : 16<sup>th</sup> June 2025**

Sl. No.	Query / Clarification Sought	Clarification/Amendment
1	<b>Seat Interface / Attachment Track Specification:</b> A bidder asked if the floor's seat interface / attachment track adheres to MS 33601B Standard	<p><b><u>Clarification:</u></b>  The track and the interface are under the scope of the supplier, where the supplier should comply with MS 33601B. Additionally, CAD geometry of the cockpit floor and a typical seat rail interface structure are provided to assist bidders in understanding the interface design. It is re-emphasised that the supplier must provide seat rails and seats as per the tender document, which is a vital part of the package.</p>  <p style="text-align: center;">Fig.1 Typical Seat Rail – Floor Interface Geometry</p>
2	<b>Documentation Submission Timeline Extension: (Section 4.6 of the tender doc)</b> A bidder inquired about extending the documentation submission timeline	<p><b><u>Amendment:</u></b>  Supply of the Interface Control Document (ICD) must adhere to the timelines in section 4.6 of the tender document. However, there is flexibility in providing the remaining documents (in section 4.2.5) up to the supply of the seats as per the tender document.</p>
3	<b>Ground Handling Equipment (GHEs) Mentioned in Tender:</b> A Bidder noted no mention of Ground Handling Equipment (GHEs) in the current tender document.	<p><b><u>Clarification:</u></b>  GHEs required for seat installation / storage / maintenance and other services may be provided as additional items / accessories, and charges for these items can be listed under “Any other charges” in Chapter 5 of the tender document.</p>
4	<b>Tight Delivery Schedules:</b> A Bidder was concerned about the tight delivery schedules and requested an extension.	<p><b><u>Clarification:</u></b>  Due to the tight timelines of the Saras Mk II Program, the current tender requires off-the-shelf seats with the delivery schedules as per the tender document.</p>

5	<b>Reference to SRP (Seat Reference Point) and DEP (Design Eye Point):</b> A bidder asked if there is a reference to SRP and DEP in the specifications	<b>Clarification:</b> Dimensions provided already adhere to SRP and DEP requirements. Bidders are encouraged to follow the specified seat dimensions and respect the cockpit envelopes provided therein.																																																																				
6	<b>Anthropomorphic Data:</b> A bidder inquired about anthropomorphic data or human dimensions related to the seat.	<b>Clarification:</b> The anthropometric data table is provided for bidders' convenience. The dimensions listed in the table are relevant to the 3P to 97P pilot population. The seating system offered by the bidder should cater to the range of dimensions provided in the table below. <table><tr><th rowspan="2">Sl. No.</th><th rowspan="2">Anthropometry Parameters</th><th colspan="3">Transport category Anthropometric Dimensions to cater for</th></tr><tr><th>3P</th><th>50P</th><th>97P</th></tr><tr><td>1</td><td>Weight (Kg)</td><td>57.6</td><td>73.0</td><td>93.0</td></tr><tr><td>2</td><td>Standing height</td><td>162.7</td><td>172.7</td><td>183.8</td></tr><tr><td>3</td><td>Sitting height</td><td>83.7</td><td>89.9</td><td>96.5</td></tr><tr><td>4</td><td>Shoulder height</td><td>54.9</td><td>60.6</td><td>65.9</td></tr><tr><td>5</td><td>Leg length</td><td>99.0</td><td>107.0</td><td>116.3</td></tr><tr><td>6</td><td>Thigh length</td><td>53.5</td><td>59.2</td><td>65.0</td></tr><tr><td>7</td><td>Knee height</td><td>49.1</td><td>53.9</td><td>59.1</td></tr><tr><td>8</td><td>Arm reach</td><td>76.9</td><td>84.8</td><td>92.7</td></tr><tr><td>9</td><td>Elbow reach</td><td>42.9</td><td>47.7</td><td>54.3</td></tr><tr><td>10</td><td>Shoulder width</td><td>40.0</td><td>44.5</td><td>53.5</td></tr><tr><td>11</td><td>Hip width</td><td>31.6</td><td>36.0</td><td>43.1</td></tr><tr><td>12</td><td>Eye level height</td><td>72.6</td><td>79.4</td><td>86.6</td></tr></table>	Sl. No.	Anthropometry Parameters	Transport category Anthropometric Dimensions to cater for			3P	50P	97P	1	Weight (Kg)	57.6	73.0	93.0	2	Standing height	162.7	172.7	183.8	3	Sitting height	83.7	89.9	96.5	4	Shoulder height	54.9	60.6	65.9	5	Leg length	99.0	107.0	116.3	6	Thigh length	53.5	59.2	65.0	7	Knee height	49.1	53.9	59.1	8	Arm reach	76.9	84.8	92.7	9	Elbow reach	42.9	47.7	54.3	10	Shoulder width	40.0	44.5	53.5	11	Hip width	31.6	36.0	43.1	12	Eye level height	72.6	79.4	86.6
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7	<b>Low-Fidelity CAD Model Sharing Reiteration</b>	<b>Clarification:</b> A low-fidelity CAD model portion of the cockpit for evaluation purposes will be shared, specifically for bidders to conduct internal packaging studies. Interested bidders were requested to provide their email IDs for the same.																																																																				
8	<b>Dimension 'I' in Figure and Chapter 4 Update</b>	<b>Amendment:</b> Dimension "I" will be updated in Figure 1 in Chapter 4																																																																				

  
Signature of Indentor

  
Signature of Project Leader

**CSIR-NATIONAL AEROSPACE LABORATORIES  
BENGALURU**

**COMMERCIAL QUERIES & CLARIFICATION**

**Tender Id : 2025\_CSIR\_236570\_1**

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

**Item Description: Supply of FAR-23 certified Pilot and Co-Pilot Seat for the Saras Mk II**

**Date : 16<sup>th</sup> June 2025**

Sl. No.	Query / Clarification Sought	Clarification/Amendment
1	Difficulty Downloading Tender Document:	Kindly refer Sl. No. 05 under General Instructions to Bidders of the Tender document.
2	Excise Duty Exemption:	Only concessional Custom Duty Exemption under Notification No. 51/96-Customs dated 23-July-1996 is applicable as per Tender Clause No. 1.12.9 (a).
3	Make in India Content Exemption:	MII Local content requirement is not applicable to GTE. However, Purchase preference to MII bidders, if any is as per the Policy.
4	Annual Turnover Cost Criteria	Equivalent currency in INR may be provided.
5	General Commercial Queries	Any commercial queries are to be addressed to (purchasek@nal.res.in).

  
**Sr. Controller of Stores & Purchase**

**NATIONAL AEROSPACE LABORATORIES  
BENGALURU - 560 017**

TENDER ID: 2025\_CSIR\_236570\_1  
TENDER NO.: NAL/PUR/STTD/179/23  
DATE & TIME : 16/06/2025 @ 11:00am  
VENUE: THROUGH WEBEX

ANNEXURE - I

**Pre-Bid Conference for - SUPPLY OF FAR 23 CERTIFIED PILOT AND CO-PILOT SEATS FOR SARAS MK-II**

Sl. No.	Name of the Firm	Name & Designation of Representative	E-tender Registration (Yes/No)	Email ID
1	MTAR Technologies Ltd., India	Mr. Arun Krishna, Key Account Manager- Defence& Aerospace		arun.bugga@mtar.in
2	MTAR Technologies Ltd., India	Rohit Khera, Resident Director		Rohit.khera@mtar.in;
3	IAI Golan	S Amir, Projects Department Manager		samir@iai.co.il
4	IAI Golan	Avorenstein		avorenstein@iai.co.il;
5	IAI Golan	Ronen Regerman, VP Marketing		rregerman-inpvt@iaiworld.co.il
6	Martin Baker	C Venugopal, External Business Development, UK		VCheluvaiah@martin-baker.in;
7	Martin Baker	Alex Pritchard, Principal Design Draughtsman		
8	MANRICH SPECIALOPS INTERNATIONAL PVT LIMITED	Cdr Sreedeeep Sreedharan (Retd), Assistant Director		defence@manrichdefence.com;
9	MANRICH SPECIALOPS INTERNATIONAL PVT LIMITED	Prachi Parmita, Manager- Projects		prachi@mgseating.com
10	TimeTooth Technologies Pvt. Ltd	Janhavi Nene, VP Engineering		janhavi@timetooth.com;
11	TimeTooth Technologies Pvt. Ltd	Girish Mudgal, Director		girish@timetooth.com
12	TimeTooth Technologies Pvt. Ltd	Imran, Project Manager		imran@timetooth.com