

## NAL/PUR/FMCD/239/22-Z

12-May-2023

## **CORRIGENDUM**

In continuation to our tender No. NAL/PUR/FMCD/239/22-Z, (Tender ID: 2023\_CSIR\_151448\_1) uploaded on 12-May-2023, for "Design development assembly and installation of visual projection system", please note the following changes in the pre-bid meeting:-

Sl.	Clause no,	Current	Amendment of Tender
No.	Pg in RFP	Description/requirement	Document
	Chapter -4,	Projectors-Three projectors	Projectors-Three projectors
1.	Page no 49,	shall be used to cover the above	shall be used to cover the above
	Point-6	said FOV. The projectors shall	said FOV. The projectors shall
		be mounted above the cockpit	be mounted above the cockpit
		shell without obstructing	shell without obstructing
		visibility from cockpit. The	visibility from cockpit. The
		mounting of projectors shall	mounting of projectors shall
= - G		not obstruct free movement of	not obstruct free movement of
		personnel / pilots from/to	personnel / pilots from/to
		cockpit. As the room floor-	cockpit. As the room floor-
		ceiling height is 8 m, a self-	ceiling height is 8 m, a self-
		supporting rigid gantry	supporting rigid gantry
		structure firmly grouted to	structure firmly grouted to
	G	ground to be designed and	ground to be designed and
		erected for mounting the	erected for mounting the
		projectors. There shall be an	projectors. There shall be an
		overlap of about 10% between	overlap of about 10% between
		two projectors. Vendor can	two projectors. Vendor can
		decide on the suitable projector	decide on the suitable projector
		– lens configuration to suit the	<ul> <li>lens configuration to suit the</li> </ul>
		requirements	requirements
		Vendor shall supply one spare	Vendor shall supply one spare
		projector – lens combination	projector – lens combination
		(Total 4 Projectors-cum lens)	(Total 4 Projectors-cum lens)
a			
			Vendor shall clean filters of
			projectors every six months
			during the warranty period



पी बी संख्या :1779, एचएएल एयरपोर्ट रोड, बेंगलूरु-560 017. भारत / P.B.No. 1779, HAL Airport Road, Kodihalli, Bengaluru-560 017, INDIA फोन / Phone (का / Off.) : +91-80-2508 6040-45, फैक्स / Fax : +91-80-2526 9611



CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA

2	C1 1 1	Ducientes Truce Legen unginotong	Decidentar Tyme Lagar projectors
2	Chapter -4,	Projector Type-Laser projectors	Projector Type-Laser projectors
	Page no 49,	with input resolution of atleast	with input resolution of atleast
	Point-7	1920 X 1200 pixels @ 60 Hz,	1920 X 1200 pixels @ 60 Hz,
		WUXGA.	WUXGA.
3	Chapter -4,	Average Brightness-The	As per our design, with covering
	Page no 49,	projectors should be capable of	around the screen and projectors,
	Point-8	emitting at least 7000 lumens in	7000 lumens is sufficient for
		normal mode operation.	pilot's view
4	Chapter -4,	Effective Field of view (FOV)	Using the requirements - FOV, empty space between nose tip and wall behind, projector type,
	Page no 49,	wrt DEP	visual acuity, vendor is free to choose the projector
	Point-1		lens combination which satisfies above requirements
5	Chapter -4,	Soft Blending-Soft blending	Soft Blending-Soft blending
	Page no 50,	shall be applied on the blend	shall be applied on the blend
	Point-09	zone to compensate for residual	zone to compensate for residual
		non-uniformity	non-uniformity.
			Vendor shall make markings on
			the screen every 10 deg for the
			FOV range
		Provide Floor to cockpit nose	Floor to cockpit nose tip height
	ж. ж.	tip height	dimension is 1160 mm
6	Chapter 4.2.2	Image Generators (IGs) will be	Image Generators (IGs) will be
	(i)	provided by NAL. Each IG will	provided by NAL. Each IG will
		have high end GPU with	have high end GPU with
		DP/DVI interface.	DP/HDMI interface.

Kindly, note that all other terms and conditions of the tender shall remain the same.

Controller of Stores & Purc For and on behalf of CSIR Purchase