

**PUSHPA GUJRAL SCIENCE CITY**  
Jalandhar – Kapurthala Road, Kapurthala

**Corrigendum for Clauses in Tender Document based on Pre-Bid Meeting Decisions**

Please refer to e-tender for Supply, Installation, Integration, Testing and Commissioning of High Resolution, High Brightness Full dome Digital 4K 2D Immersive multichannel Projection System with hardware and software packages, interfaces, tools and / or drivers etc. (including integration of existing audio System and cleaning of existing screen) at Pushpa Gujral Science City, Kapurthala for projection on existing 23 meter 30 degree tilted dome with 3 (three) years On-site Comprehensive Warranty including preventive maintenance and further Comprehensive AMC for next 2 years published vide tender notice PGSC/Admin/Digital Projection /2024/02

In accordance to decisions taken w.r.t. queries raised by agencies towards various clauses of Tender Document through emails and in the pre-bid meeting held online on 27.03.2024, following corrigendum is issued:

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
1.	5	14	Particulars of tender	Bid Submission End Date: 06.04.2024, 03.00 pm IST	We kindly request the bid submission deadline be extended for at least 6 weeks from the date of the Pre-bid meeting as such time is imperatively required to prepare a techno commercial response.	Regarding the Bid Submission End date specified on page 5, point 14, we require additional time to prepare necessary documents such as Annexure F, EMD, etc. These preparations are time-intensive. Therefore, we kindly request an extension of the Bid Submission Date by 30 days from the date of the final corrigendum addressing the	-	--	<b>Clause Amended as:</b>  Last date of bid submission is extended up to <b>16.05.2024, 15.00 hours IST</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
						questions raised by vendors. Extending the deadline would facilitate our thorough preparation of the tender documents.			
2.	16	3.3	Eligible bidders	OEM must have an authorized agent in India. The authorized agent must have experience of installation and integration of multichannel full dome digital projection system in India during the last 10 years. The documentary proof in this regard duly issued by the respective OEM, clearly indicating the kind of support that the Indian partner provided during the installation to substantiate the relevance of the experience, must be submitted as per Annexure D.	We would need to clarify that Annexure-D can be issued by an OEM whom the Indian Agent had collaboration in the past and is other than the current collaborated OEM with whom this bid is jointly submitted. Also, please clarify that Annexure-D is a compulsory document for this tender without which the bidder is liable to be disqualified.	-	-	Authorized Indian representative of OEM's usually work in an individual project as the part of OEM installation team under the supervision of OEM technical personal during installation and integration of Planetarium projection system. Indian representative of OEM also maintain and operate the system independently during its warranty period on behalf of respective OEM.  Therefore, it will be more appropriate if the clause is modified as below.	<b>No change in the clause</b>  It was clarified that Annexure-D is a compulsory document for the eligibility of the bidders.

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
								<p>“OEM must have an authorized agent in India. The authorized agent must have experience of installation and integration of multichannel full dome digital projection system in India <b>in association with respective OEM’s installation team</b> during the last 10 years. The documentary proof in this regard duly issued by the respective OEM, clearly indicating the kind of support that the Indian partner provided during the installation to substantiate the relevance of the experience, must be submitted as per Annexure D.</p>	

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
3.	16	3.5	Eligible bidders	OEM should have completed at least two projects related to the concept, design, supply, installation, testing & commissioning of a Digital 4K Full dome 2D or higher multichannel immersive planetarium projection system on a minimum 12 meters diameter dome worldwide during the last 10 years from the date of issue of this e-tender.	-	we seek clarification on whether projects related to the concept, design, supply, installation, testing, and commissioning of a digital 4K Full Dome 2D or higher multichannel immersive planetarium projection system, executed by the previous partner company of the OEM participating in this tender, will be considered for qualification.	-	-	<b>No change in the clause</b> It was clarified that technical bid documents of the bidders will be evaluated by the duly constituted technical evaluation committee as per terms and conditions mentioned in the tender document.
4.	17	3.14	Eligible bidders	Duly certified Balance sheet and profit and loss	-	In reference to clause 3.14 on page 17,	-	-	<b>No change in the clause</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
				account of the OEM for the last five financial years (2018-19, 2019-20, 2020-21, 2021-22 & 2022-23) should be enclosed to assess the financial soundness. In the case of foreign currency, the OEM should provide proof of Turnover and Profit and Loss equivalent to Indian Rupees (INR) considering the applicable currency exchange rate on the last day of the respective financial year. This documentation should be duly verified by an Indian Chartered Accountant (Member of ICAI).		concerning the submission of duly certified balance sheets, if encountered delays in the certification process for the balance sheets ending in 2023 in some cases. We kindly inquire whether it would be acceptable to submit documents for the previous five years instead.			It was clarified that duly certified document from Chartered Accountant (Member of ICAI) clearly indicating the Turnover and Profit and Loss of last five financial years(2018-19, 2019-20, 2020-21, 2021-22 and 2022-23) in INR should be submitted.
5.	17	3.15	Eligible bidders	OEM shall not be bankrupt or undergoing bankruptcy proceedings on the date of tender submission. OEM should submit no-bankruptcy certificate issued by appropriate	-	we seek guidance on whether the participation of the OEM in this bid would be permissible if their former or previous partner company or parent company has undergone bankruptcy	-	-	<b>No change in the clause</b>  It was clarified that technical bid documents of the bidders will be evaluated by the duly constituted technical evaluation committee

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
				Government authority of the respective country. The certificate older than six months from the date of issuing this tender will not be deemed valid.		proceedings within the last 5-7 years.			as per terms and conditions mentioned in the tender document.
6.	21	5.6	Technical Evaluation Marking Scheme, S.No 1	Experience of OEM in the tendered work (Digital 4K multichannel 2D or higher Planetarium System on minimum 12 m diameter dome)	-	-	S.No. 1: Request to pls allow experience of OEM / Bidder  Panasonic is a leading brand worldwide for Projection mapping and Museum / Immersive experiences. We are more than 100-year-old company having Pan India Service Network to support our customers. Request to pls consider our queries and allow us to meet with you in person to showcase our case studies and our strength in terms of	-	<b>No change in the clause</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
							quality and service support.		
7.	25	7, 7.1	Time of completion	Time is the essence of the work. The entire work comprising dismantling and removal of existing projection equipment, other existing installations etc. and Supply, Installation, Integration, Testing and Commissioning of High Resolution, High Brightness Full dome Digital 4K 2D multichannel Immersive Projection system with hardware and software packages, interfaces, tools and / or drivers etc. (including integration of existing Audio System and cleaning of existing screen) at Pushpa Gujral Science City, Kapurthala shall be completed within 7 (SEVEN) months from the date of placement	Lead time for certain equipment (in particular projectors) can be very long and may not allow us to meet such a short completion period. Therefore, we kindly request that the time of completion be set to 10 (ten) months.	-	-	-	<b>No change in the clause</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
				of confirmed order or opening of Letter of Credit.					
8.	35	14	Technical Specifications- Point No 1.3- Projector-table 1.3	Type of projector- 3-Chip DLP Projectors with RGB Pure Laser Light Source Lumens of 40,000 or more and contrast ratio of 5000:1 or better with high frame rate of 60hz	-	.	Brightness need to change from 40000 lumens to 50000 lumens. Light Source should be RGB Laser and Laser Phosphor or allow both	-	<b>No change in the clause</b>
9.	36	14	Technical Specifications- Point No 1.4- Projector	Source Life Minimum 50,000 hrs in standard mode	-	we kindly request a correction in the specifications as follows. We recommend consulting the latest projector catalog or the websites of the projector OEM for accurate information:  <ul style="list-style-type: none"> <li>• Source life of 25,000 hours to 50% brightness when operated at 100% brightness.</li> <li>• Source life of 50,000 hours to 50% brightness when operated at 60% brightness</li> </ul>	-	-	<b>Clause amended as:</b>  Source Life: 50,000/25000 hours in Economy/Standard mode  <b>According clause at Page No 32 under Scope of work point A S.No 2 is also amended as under</b>  Each 3 chip DLP projector shall be pure RGB Laser with source life of 50,000/25000 hours in Economy/standard



Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
									mode
10.	36	14	Technical Specifications- Point No 1.4- Projector table 1.4.1	Display Technology Three chip DLP Source : RGB Pure Laser	-	-	Page No. 36 – Table 1.4.1 Light Source needs to change from RGB Laser to Laser Phosphor or allows both. Also, Light Source life should be 20000 hrs or more. It is standard as per industry.	-	<b>No change in the clause</b>
11.	37	14	Technical Specifications - Projector	Warranty Manufacturer's standard warranty of not less than five years on projectors.	-	Regarding Clause 14 on page 31, pertaining to Warranty on the projector, you specify a requirement for a "Manufacturer's standard warranty of not less than five years on projectors." However, it's worth noting that the standard warranty offered by projector manufacturers typically spans three years from the date of purchase by the planetarium supplier. Please confirm if this aligns with your expectations.	-	-	<b>No change in the clause</b>  It was clarified that standard warranty of five years on projectors has been kept to cover the comprehensive warranty period of three years and comprehensive AMC period of two years after expiry of warranty period.

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
12.	41	3.5.10	Show Builder for developing Full Dome astronomy shows in 4K	System software should include the American Museum of Natural History Digital Universe or an equivalent database dully validated strictly by a reputed international organization working in the field of astronomy/ astrophysics. There should be provision for on line updation of the show elements.	-	-	-	Sky Skan and RSA Cosmos have developed their own software dataset as "Digital Sky Dark matter" and "Sky Explorer Live Atlas" Data set whereas Evans and Sutherland uses the licensed version of Digital Universe Dataset developed by American Museum of Natural History's Hayden Planetarium. Both "Digital Sky Dark matter" and "Sky Explorer Live Atlas" Data set are at par or better than AMNH Digital Universe in terms of scientific research based data. But none of the three are validated by any reputed international organization working in the field of astronomy/ astrophysics. No	<b>No change in the clause</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
								international organization working in the field of astronomy/ astrophysics usually ready to validate any such database produced by some private company. Hence, it will be <b>better to remove “duly validated by a reputed international organization working in the field of astronomy/ astrophysics”</b> to avoid any confusion at later stage.	
13.	44	6, 6.1.1	Calibration and Alignment	<b>Software, hardware and multi-camera based mechanisms</b> to be included in order to ensure error free edge blending / geometric correction on screen as well as to maintain uniform colour, and	You are requesting an automatic feature to achieve calibration and alignment of your projection system. Any camera based system that can achieve the desired result should be accepted:	-	-	-	<b>No change in the clause</b>

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested				Clarifications/ Recommendations
	Page	Section No.	Section Name						
				contrast on projectors and dome screen.	"Software, hardware and camera-based mechanisms to be included in order to ensure error free edge blending /geometric correction on screen as well as to maintain uniform color, brightness and contrast on projectors and dome screen."				
14.	45	7, 7.1	Integrated Audio System	The projection system is to be integrated with the existing 8 channel audio system model PD-80, of Otari, Japan make (PD-80 sound system, 8 Channel of Otari, Japan Large Format Film Projection System of GOTO, Japan make installed in the Dome Theater	We would like to indicate that it is not possible to integrate the existing Audio System (PD-80 sound system, 8 Channel of Otari, Japan make) with the new fulldome system. The existing system is interlocked with Astrovision and this cannot be broken. A new digital audio system must be provided capable of perfectly synchronizing with the new fulldome system.	-	-	-	<b>No change in the clause</b>

In addition to above mentioned clarifications, the rest of the tender document remains same. This corrigendum is issued with the approval of competent Authority