

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 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.

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 10.05.2023, following corrigendum is issued:

Sr. No.:	Tender Reference			Statement as per tender document	Queries / Points raised / Amendment Requested	Decisions/Clarifications
	Page	Section No.:	Section Name			
1.	5	14	Particulars of tender	Bid Submission End Date: 20.05.2023 at 1500 hours IST	We kindly request the bid submission deadline be extended for at least 4 weeks from the date of the Pre-bid meeting as such time is imperatively required to prepare a technocommercial response.	Clause Amended as: Last date of Bid Submission is extended up to 05.06.2023
2.	16	3.3	ELIGIBLE BIDDERS	The bidder must have installed at least 1(one) 2D immersive projection system (Multi-Channel 4K resolution in India and at least 1(one) 4K or higher resolution 2D immersive projection system for 18-diameter or higher anywhere in the India / World and should be operational & functional in all aspects for at least one year from date of successful installation.	Please clarify “anywhere in India / World “means India as well as world. Or it means India or World?	Clause Amended as: The bidder must have installed at least 1(one) 2D immersive projection system (Multi-Channel 4K resolution in India and at least 1(one) 4K or higher resolution 2D immersive projection system for 18-diameter or higher anywhere in the World and should be operational & functional in all aspects for at least one year from date of successful installation.

3.	16	3.6	ELIGIBLE BIDDERS	The Bidder and or Local agent should have completed similar works (as installation of 2D immersive projection system (Multi-Channel 4K resolution in India and at least 1(one) 4K or higher resolution 2D immersive projection system for 18 m-diameter or higher anywhere in the India / World and should be operational & functional in all aspects for at least one year from date of successful installation.) with similar make during the last 10 (ten) years from the date of the issue of this E-TENDER.	Work Experience Eligibility: The Bidder should have completed similar works (as New Technology based Dome Projection 270/ 360 degrees projection mapping anywhere in the India / World and should be functional in all aspects for at least one year from date of successful installation.) with similar make during the last 10 (ten) years from the date of the issue of this E-TENDER	NO CHANGE in the Clause
4.	16	3.7.1	ELIGIBLE BIDDERS	Here the similar works shall mean concept, design, supply, installation, testing & commissioning of Digital 4K Full dome 2D immersive planetarium projection system on minimum 18 m diameter Screen.	Here the similar works shall mean concept, design, supply, installation, testing & commissioning of New Technology based projection mapping 270 degrees/ 360 degrees	NO CHANGE in the Clause
5.	16	3.7.2	ELIGIBLE BIDDERS	In the case of Consortium/JV participating in this E-TENDER, the works of all the individual members of the Consortium/JV done independently will be considered as valid work experience but have not been done in conjunction or partner of any other consortium or JV .	In the case of Consortium/JV participating in this E-TENDER, full weightage will be given for the past experience executed in consortium.	Clause Amended as: In the case individual member of Consortium/JV participating in this E-TENDER, proportionate weightage (as per agreement) will be given to the individual member for the past experience of the similar work executed in consortium subject to submission of consortium agreement.
6.	16	3.7.3	ELIGIBLE BIDDERS	If any bidder has executed the similar work as a part of a consortium/JV in the past then the work experience of the bidder shall be considered as valid only if all the consortium/JV partners are participating together in the present E- TENDER also.	This clause shall be deleted	Clause Amended as: In the case individual member of Consortium/JV participating in this E-TENDER, proportionate weightage (as per agreement) will be given to the individual member for the past experience of the similar work executed in consortium subject to submission of consortium agreement.

7.	20	5.5.2	Financial Evaluation Financial Bid	The lowest financial bid complete in all respects shall be selected for award of contract.	Strongly Recommended QCBS (80:20) This is highly specialised job at a very prestigious site and will turn in to a very attractive heritage therefore quality of work and technical superiority must be a prime factor, while finalising the competent bidder for the said work. The practice adopted by almost all the departments PAN India while executing such type of work is quality cost based selection system (QCBS) with higher weightage to technical part (either 80% or at least 70%) For the financial part lower weightage is assigned, (Either 20% or 30%). By adopting this practice it is ensured that the most technically competent bidder is selected for executing such kind of projects. Therefore, you are requested to adopt QCBS evaluation criteria for this tender with either 80:20 or 70:30 (Technical and Financial weightage respectively).	NO CHANGE in the Clause
8.	21	5.6.1	Technical Evaluation Marking Scheme	Experience of applicant/agency in the tendered work (Digital 4K 2D higher on minimum 18 m dia Screen Planetarium System 5 Years- 10 Marks More than 5 years upto 10 years - Bonus 2 Marks More than 10 years –Bonus 5 Marks Maximum Marks - 15 marks	Experience of applicant/agency in the tendered work (Technology based projection mapping/ Lightning Work) 5 Years- 10 Marks More than 5 years upto 7 years - Bonus 2 Marks More than 7 years –Bonus 5 Marks Maximum Marks - 15 marks	NO CHANGE in the Clause

9.	23	5.6.1	Technical Evaluation Marking Scheme	Operation and maintenance experience for Digital 4k 2D / active 3D Full dome theatre on minimum 18 m dia screen at least for one year Minimum 1 project- 3 Marks 1 Mark for each additional project- Maximum Marks - 05 Marks	Operation and Maintenance experience for Projection Mapping/ Illumination at least for one year Minimum 1 project- 3 Marks 2 Mark for each additional project- 2 Marks	NO CHANGE in the Clause
10	24	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 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 of confirmed order or opening of Letter of Credit.	Request for extension in completion time of Project	NO CHANGE in the Clause
11	25	9.1	General Terms of Payment	9.1.1. 60% (Sixty percent) of the total sum of the imported items on shipment of the entire materials/consignment and presentation of the dispatch documents. 9.1.2. 40% (Forty percent) of the total sum of the imported items after successful installation, testing and commissioning of the fully integrated high resolution immersive Full dome digital 2D projection system at site and successful running of Full dome 2D large format film shows and planetarium shows".	We kindly request that you consider the following payment terms. Given the high value of the projectors, waiting until the completion of the installation to receive payment may cause unnecessary blockage of funds. 1. 60% against presentation of the dispatch documents 2. 30% against the delivery of the entire items at site 3. 10% against the successful installation and commissioning of the system.	NO CHANGE in the Clause Clarified that 60% (Sixty percent) of the total sum of the imported items excluding AMC charges will be released on shipment of the entire materials/consignment and presentation of the dispatch documents

12	25	9.2	General Terms of Payment	For annual maintenance contract for two years(beyond the warranty period of three years), the payment shall be made half-yearly on satisfactory completion of the work and this payment schedule shall continue for the entire duration of the contract.	We request you to please consider the advance payment for AMC as below. For annual maintenance contract for two years....., the payment shall be made half yearly in advance And this payment schedule.....the contract.	NO CHANGE in the Clause
13	31	Section 1	Scope of Work	The existing Audio System (PD-80 sound system, 8 Channel of Otari, Japan make) will be integrated with new system.	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.	NO CHANGE in the Clause
14	32	11	Scope of Work	Cleaning of existing Perforated Aluminium Dome screen from inside to make it completely clean and dust free.	Request for modification in the clause	NO CHANGE in the Clause, Clarified that in case, during process of cleaning of dome screen, any insulation material is required to be replaced, it will be the responsibility of the bidder Further, cost of building a temporary platform and installing moveable scaffolding during execution of the work will be borne by the bidder
15	32	13	Scope of Work	The bidder shall submit detailed layout design, capacity, load calculation, requirement of cooling of projectors etc. for Full dome Theatre including area of placement of projectors, Image Generators, etc. This work will be taken up by the bidder after approval of PGSC.	Further to this clause, we would like PGSC to confirm that for the cooling of the projectors etc, it would be responsibility of PGSC to provide the necessary temperature and humidity conditions near the projection systems and Computer rack.	Clarified that: Arrangement for cooling of projectors and computer rack will be the responsibility of PGSC, however, bidder will be required to provide capacity and load calculation of the air conditioning system to be installed for the same

16	37	2.2.3	Image Generators	Dual Port ATI/NVidia or equivalent graphic card. The graphic card must have the video frame buffers that must store and synchronize the video frames so that the same frames are always output at the same time.	<p>Instead of describing a sync method of buffer usage, we suggest to keep this open and use expressions that describes the actual result requested:</p> <p>The dome digital projection system must ensure the synchronization of all video channels that make up a common overall image on the dome so that all images are displayed synchronously. The areas of overlapping images from individual projectors (so-called blending) must be invisible to viewers.</p>	<p>Clause Amended as:</p> <p>Dual Port ATI/NVidia or equivalent graphic card. The graphic card must ensure the synchronization of all video channels that make up a common overall image on the dome so that all images are displayed synchronously. The areas of overlapping images from individual projectors (so-called blending) must be invisible to viewers.</p>
17	43	6.1.1	Auto alignment and calibration	Software, hardware and multi-camera based mechanisms to be included in order to ensure error free edge blending / geometric correction on screen as well as to maintain uniform colour, and contrast on projectors and dome screen.	<p>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 because what is really important is the result and not the number or cameras.</p> <p>Therefore, we kindly request that this phrase be replaced by the following:</p> <p>"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."</p>	<p>NO CHANGE in the Clause</p>

18	45	10.1	<p>Cleaning of existing Perforated Aluminum Dome screen from inside to make it completely dust free</p>	<p>Cleaning of existing Perforated Aluminum Dome screen from inside thorough vacuum cleaning and then cleaning with ph neutral solution from inside to make it completely dust free. The cloth used for cleaning should be very soft, free from fur/tomentum. Cleaning work should be carried out with utmost care and safety. Bidders are advised to visit PGSC for physical inspection of the dome screen in order to assess the condition of dome surface and accordingly give cost of cleaning, in the financial bid. Tools, tackles, ladders, scaffolding, labour personnel and consumables shall be in the scope of bidder for this work. PGSC shall provide electrical connection, lighting and water supply for belongings of the cleaning personnel. Any damage to the dome screen during cleaning due to negligence of the cleaning personnel shall be recovered from the bidder/supplier providing the services</p>	<p>We have conducted a thorough inspection of both the dome and Dome Theater, and would like to bring to your attention that the current dome is quite old and has several noticeable patches of dirt. The interior of the dome theater also contains a considerable amount of dust, including on the back side of the dome, which may not disappear even after professional cleaning. Due to the dome's age, some of the aluminum panels are in poor condition. Therefore, we kindly request that appropriate modifications be made to this clause. It is important to note that the manufacturers have expressed concern with the current language, as the work required falls outside of their responsibility and involves local labor. As such, the last line of the clause, which states that any damage to the dome screen during cleaning due to negligence of the cleaning personnel shall be recovered from the bidder/supplier providing the services, should be removed</p>	<p>NO CHANGE in the Clause Clarified that in case, during process of cleaning of dome screen, any insulation material is required to be replaced, it will be the responsibility of the bidder. Further, cost of building a temporary platform and installing moveable scaffolding during execution of the work will be borne by the bidder</p>
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In addition to above mentioned clarifications and decisions, the rest of the tender document remains same.

This is issued with the approval of competent Authority