



भारतीय ताराभौतिकी संस्थान INDIAN INSTITUTE OF ASTROPHYSICS

विज्ञान और प्रौद्योगिकी विभाग, भारत सरकार, के अंतर्गत स्वायत्त संस्था

An Autonomous Body under Department of Science & Technology, Government of India
द्वितीय ब्लॉक Second Block कोरमंगला Koramangala बेंगलुरु Bengaluru 560034

Minutes of Pre-Bid- Meeting

Description: Supply, Installation, Commissioning, Testing, and Maintenance (AMC) for LED Dome True 8K Digital Planetarium System at COSMOS, Mysuru.

Date and Time for Pre-Bid meeting: 23rd Sep 2022 at 11 AM IST

Mode of Pre-Bid Meeting: Hybrid

The following Bidders' Representatives attended the pre-bid meeting:

SI No	Participant's Name	Designation & Company Name
1	Mr. Abhijit Shetye	MD, Infovision Technologies Pvt. Ltd Indian Representative of Evans & Sutherlands
2	Mr. Scott A. Niskach	Director of International sales, Evans & Sutherland
3	Mr. Zack Noyce	Evans & Sutherland
4	Mr. Anjanava Maitra	CEO, Orbit Animate Pvt Indian Representative of RSA Cosmos
5	Mr. Benjamin CABUT	Managing Director, RSA Cosmos
6	Mr. Soumen Das	GoTo India, Indian Representative of Carl Zeiss

IIA officials were present in the meeting to provide clarification to the queries raised by the prospective bidders.

The queries raised by the prospective bidders were discussed and clarified during the meeting. The clarifications arrived thereof are indicated as enclosed / attached.

K.P. Vishnu Vardhan
Sr. Stores & Purchase Officer

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder		IIA's Response
1	Pg. 14/12.3	Processor: 8Core Intel Xenon Processor	To drive the required LED Dome / Display latest stable server should have 8core xenon for more powerful computation. Therefore, we request to modify to "minimum 8 Core"	Tender condition prevails.
2	Pg. 14/12.3	Not included in Dell servers as it is an obsolete technology	8X DVD ROM is now obsolete item and it is not being offered by any branded computer OEM. Hence we request to delete this clause	Tender condition prevails.
3	Pg. 14/12.3	Other systems do need it but Carl Zeiss system do not need due to. Our data are on the NAS, we do not have data on the graphic computer. It is the same with the other computers	Not needed for Zeiss system. Hence we recommend to modify this clause.	Tender condition prevails.
4	Pg. 15/12.3	Zeiss Simulation software not support Python JavaScript ECMA scripting language	Hence we recommend to modify this clause	Tender condition prevails.
5	Pg-34,35	LED Dome is new and emerging technology in planetarium field. Very few LED dome planetarium installations are there in the world and all are less than a year of operation. Moreover, there are only 3-4 experienced planetarium integrator are working in the field of Planetarium. We believe that with the evaluation criteria mentioned in the RFQ, a single vendor will only be able to qualify for the financial bid. Hence we humbly request to tender authority to kindly review the evaluation criteria and give a fair chance to the vendors who has years of proven experience in planetarium system integration.		Tender condition prevails.
6	Pg-34, SL no-4, 5 & 6			

SI No	Pg. No./ Clause no.	Queries/Suggestions by bidder	IIA's Response
7	Pg - 21, 12.6	What are the specifications for controlling theatre lighting?	General lighting for the planetarium building will be designed by the selected Architectural consultancy firm. Specifics for the sky theatre, i.e., control theatre lighting system, the routing and termination shall be given by the selected equipment bidder.
		Who is providing the core lighting system, exit and emergency exit signage lighting?	This is in the scope of Contractor carrying out the Civil Engg. and other works.
		What is included in "other equipment" the show control system is expected to control?	The show control system should include all necessary components to run the shows successfully, without interruption. 'Other equipment' here means that all such (miscellaneous) equipment required for the shows are to be considered and provided by the Equipment bidder for the sky theatre.
		What is meant by "media" in this context?	Shows/Programmes
		Are the systems included here DMX-controlled systems?	Question not clear.
		Please provide details of these systems including quantity so we can plan for how to control	This is in the bidder's scope
8	Pg - 27, 12.15, 12.16	In Item 12.15 (p. 27), you state you will take responsibility for general lighting both inside and outside the Dome Theatre, but Item 12.6 (p. 21) requires control of these lighting systems. Please provide detail information of what lights you are asking us to control including manufacturer, quantity and control specifications.	On & off control of the ambient light within the sky theatre should be in sync with the show timings. The control of all such lights, including manufacturer, quantity and control specifications for the sky theatre alone shall be framed by the bidder and also provided in the sky theatre.

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder	IIA's Response
9	Clause - 13.3.b, 12.13.	How many years following the included two (2) years do you want for the optional AMC? Item 13.3.b. Criteria B Sr. No. 6 (p. 36) requests "Comprehensive AMC (3rd, 4th and 5th year)". Item 12.13. (p. 26) says "Five years (3rd to 7th year) –comprehensive AMC and operations". And Page 31 requests "details of components under "3rd to 7th year–comprehensive AMC."	First two years is warranty period, followed by Comprehensive AMC required for 5 years, i.e., from 3rd – 7th year. First 3 years of comprehensive AMC i.e., 3rd, 4th and 5th year will be performed by the selected bidder. At the end of the 5th year, IIA will decide whether to continue the comprehensive AMC for the next 2 years i.e., 6th and 7th year based on their satisfactory performance in the 3rd, 4th and 5th years.
10	Pg - 25 & 26, 12.12	Our assumption is the facility support for the LED Dome is part of the building in coordination with the LED dome supplier. Is this correct?	Yes.
		Is the "False floor material" listed regarding the temporary floor used during installation of the dome or something else? Having the temporary false floor provided by the building contractor to vendor specifications is typically the most cost-effective option for installation. Is that the intent here? Or does "false floor" refer to a permanent construction?	The design of HVAC and electrical systems will decide whether false flooring is permanently required or not. However, any temporary false flooring or scaffolding etc., for installation of sky theatre dome shall be under bidder's scope.
11	Pg - 12, 12.1	Item 12.1 (p. 12) specifies "Must include spatial audio with multiple channels delivering an immersive experience, as per specification." The specification, Item 12.7 (p. 22) does not mention "spatial audio." Please confirm if the system requires spatial audio.	Yes, as already specified in item 12.1, it shall be spatial audio.
12	Pg - 6, Preamble	"Dolby digital surround system" is mentioned in section 2. Preamble (p. 6). Are you asking for this to define that you specifically want Dolby-branded systems or using it in a generic sense to describe the surround sound system?	Audio system may be as per list of makes as specified in RFP.
13	Pg - 11, 12.1.b	A bullet point under Item 12.1.b) (p. 11) specifies that LED "panels must affix to an adjustable frame allowing for fine-tuning of the dome shape to ensure delivered display matches specification to within a small margin of error."	Question not clear.

SI No	Pg. No./ Clause no.	Queries/Suggestions by bidder	IIA's Response
14	Pg - 25, 12.12	<p>Technical Inputs Required for Civil Structural Design (final bullet, p. 25) requests technical inputs regarding “electrical maximum demand load, backup Diesel Generator (DG) load, Inverters load, Total AC load, quality of input electrical power required.” Most of these items were immediately clear, but our engineers requested clarification about two items. Can you clarify what is meant by “back up DG load” and “Inverters load”? Please define and provide clarifying information so we can give appropriate values.</p>	<p>Back up DG load-Electrical load required to run the show without interruption in case of mains failure during the show.</p> <p>Inverters load-Capacity of the Uninterruptible Power Supply (UPS) required to run the show without interruption in case of a mains failure till the DG takes over.</p>
15	Pg - 26, 12.12	<p>Technical Inputs Required for Civil Structural Design (p. 26) describes a requirement for selected bidder to supply technical inputs regarding “Electrical/ Instrumentation/ Network AC ducting entry & exit routings inside the sky theatre and in annular space etc., Smoke detectors, Fire Sprinklers if any its routings” as well as “Alignment of seats, rows, aisle space, Floor drops between the rows, False floor area & Cable routing in the FF, Entry/ Emergency Fire Exits.” Meanwhile, Item 12.18 User Training and Documentation, Notes (p. 28) states “Bidder must design, engineer, and deliver a custom solution for the theatre layout of the planetarium.”</p> <p>Can you please clarify the level of theatre design services being requested and the responsibilities associated? Is the expectation that we design and engineer the theatre (including parts other than the LED dome) ourselves or simply provide input to a contractor in terms of theatre design (such as seat layout, entrances, exits, etc.) so that their design will properly accommodate and fit with the LED dome? Please clarify that the owner (IIA) is providing all building electrical, network, HVAC, smoke detectors, fire sprinklers, seats, false floor, carpeting, temporary scaffolding, etc.</p>	<p>Input data for the design of civil - structural supporting details (self and dead weight loading details to design the structural system for the dome, like weight of the structure that the bidder erects to place the LED panels) and data for design of all other engineering services, including all architectural (any specific theatre layout, seating , exits, etc.), acoustical requirements and any special features needing attention of the architect for designing the sky theatre to be provided by the bidder, along with recommended makes of materials, etc., based on which architect will design and furnish details.</p> <p>The Bidder shall provide data for all engineering services required for the audio and video functions of the sky theatre, including for all engineering, interior and acoustical designs, through the project until testing, integrated commissioning and handing over.</p> <p>IIA, through the Civil contractor, will provide all building electrical, network, HVAC, smoke detectors, fire sprinklers, seats, false floor (in case it is required as per design), carpeting, etc. Temporary scaffolding or staging as maybe required for erecting the dome shall be provided by the bidder.</p>

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder		IIA's Response
16	Pg - 43, 14.h	We request that the cap on liquidated damages (14.h, p. 43) be reduced from 10% maximum to 5% maximum.		Tender condition prevails. However, during the course of the project, genuine requests with valid justifications may be considered.
17	-	Is it acceptable for the online CPP submission process to be completed on our behalf by our Indian agent?		Yes. However, a declaration from the OEM authorizing their Indian agent to submit the bid, must be uploaded.
18	Annexure 3	In the USA, no such certificate exists. Can this requirement be satisfied with an official government document that states we are a taxpayer and our registration number or a government document that states we are current on all tax payments?		YES
19	Pg - 34, 13.3.b	Is a document stating that we have a line of credit of the USD equivalent to 25,00,00,000 INR sufficient to satisfy this requirement?		YES
20	Point 2	As your project is a 2D planetarium with the possibility to evolve in 3D, please confirm that this sentence should be read as "Number of 2D or 3D planetariums systems"	Point 2: Number of 2D or 3 D planetarium systems with dome size of 15m diameter or more, installed in the last 10 years.	2D/3D means 2D or 3D.
21	Point 3	<p>We opine the fact that a local agent is working for long with a specific Bidder is not as important as their own experience in the field of planetarium.</p> <p>As written in the RFP, and considering the current local context, this sentence is also favoring one specific company and therefore may yield lopsided results in the process of evaluation.</p> <p>We would appreciate that this could be changed to focus only on the years of experience and number of successful projects executed for 15m diameter Domes and above in India</p>	<p>Point 3: The Bidder should have an authorized Indian agent. If the authorized agent of the Bidder is working in the field of planetarium;</p> <p>Up to 5 years - 10 marks Above 5 years – 20 marks</p>	<p>Tender condition prevails.</p> <p>Query by Mr.Anjanava Maitra - Weightage of the points to be reconsidered, as it is very high. Response: Its only for technical evaluation, not for commercial evaluation. However, it'll be looked into, and inform if there are any changes.</p> <p>Query By Mr.Abhijit Shetye - What does up to 2 years mean? What is the lower limit of the experience? Response: any experience will be considered. It is framed, in order to not eliminate any bidder.</p>

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22	Point 5	<p>A planetarium is using a lot of hardware and software. We always recommend acquisition of spare parts, but due to budget limitation it is not always a solution selected by final users. Therefore, we can commit on giving the strongest efforts to avoid any loss of operation, but it is not always possible to avoid such situation in all planetariums. Thus, we would like you to review that point.</p>	<p>Years of supportive maintenance and AMC undertaken by the Indian agent. The bidder has to submit recommendation letters of planetariums of more than 15m, attesting the good support of the Indian Agent.</p> <p>1-5 planetariums - 15 marks More than 5 planetariums – 30 marks</p>	Tender condition prevails.
23	Point 6	In Europe banks are not able to issue such document.	Documentation evidence that the Bidder has the proper financial strength to handle the project (Balance and P&L of the last 3 years).	YES

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder		IIA's Response
24	1.6	<p>The Digital Universe Database from AMNH is a set of datasets that has been adapted by AMNH for visualization in domes. Digital Universe is not a free dataset and the license includes limitations in terms of use for the planetarium. RSA Cosmos has developed over many years a SUPERIOR DATASET called "Sky Explorer Live Atlas" that offers the same datasets but more up-to-date and with more data. The data of SkyExplorer Live Atlas are free, and are not bound to any license, for example you will have the right to create content with those data that you will be able to share or sell to any other planetarium, which is not possible with Digital Universe. Also, in case of evolution of the Data, you will have to pay for a new license to access the new data, which will not be the case with SkyExplorer Live Atlas. With SkyExplorer Live Atlas you'll have perpetual right of use and perpetual live upgradation facility of any and all datasets included or to be included. For your perfect information and ready reference, we leave attached a table comparing the data of Digital Universe with the Data of SkyExplorer Live Atlas in addition to this letter.</p>	<p>"System must include the complete American Museum of Natural History latest version of Digital Universe Database or a superior Astronomical database scientifically validated by a qualified PhD in Astrophysics / used by large community of reputed Planetariums worldwide".</p>	<p>System must include the complete American Museum of Natural History Digital Universe database or higher.</p>

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder		IIA's Response
25	Page 13	<p>You have mentioned multilingual audio tracks. Can you clarify if we need to provide a multilingual audio system, and if so, how many languages in simultaneous should the system handle?</p>		<p>Three. Kannada, Hindi and English.</p> <p>Suggestion by Mr.Benjamin Cabut- An option of Hardware facility (with noise cancellation headphones) for audio in other languages. Response: The presented option requires extra hardware, which is not part of the current BOQ. The bidder has to provide details of the current requirement in the bids. The bidder may mention the above mentioned feature as an additional option.</p>
26	Page 15	<p>High resolution for Earth can be accessible from Internet or can be installed locally on hard drives.</p> <p>We strongly recommend to clearly mention that the data should be local to avoid that due to a bad Internet connection or technical issue over the web architecture the data would not be available during a show.</p>	<p>High Resolution Earth & Moon Map, moons of Planets as per selected options</p> <p>For Earth, a High resolution map of all the planet of at least 15m/ pixel should be accessible without the need of any internet connection.</p> <p>For all other planets, no Internet connection should be necessary to access the High Resolution texture.</p> <p>The software shall also support loading of High resolution Texture for planets and moons, from Internet using WMS format</p>	<p>Tender condition prevails.</p>

Sl No	Pg. No./ Clause no.	Queries/Suggestions by bidder		IIA's Response
27	Page 23	<p>The tender is about delivery of hardware and software. Thus experience of OEM / local agent in show creation has no relation with the delivery of the tender.</p>	<p>We kindly ask you to remove this request as it is clearly favoring one company that has a specific show production business activity.</p>	<p>The software offered should be perpetual, the operating license & drivers etc., shall be upgraded as and when required. Bidder should provide multiple licenses as required, apart from the license required for operating the planetarium and should also confirm the details regarding the required hardware for functioning. IIA will be procuring the hardware (computers) as per the scale and requirement of the training centre.</p>
28	Page 26, 12.13	<p>We would like to clarify whether we are required to depute Operators to run daily public shows?</p>	-	<p>Yes. This is mentioned in point 12.13 of RFP and BOQ. Scope covers personnel for daily operation.</p> <p>Query by Mr.Anjanava Maitra - to depute operators, need to understand requirements such as number of daily shows, duration, days etc. Hence, are bidders allowed to quote separately for this component, as there is foreign currency involved.</p> <p>Response - In BOQ - There is an option to change/ choose the currency. Hence, AMC & operations may be quoted in INR.</p>
29	Page 48	<p>The Power of Attorney to be issued by the bidder to the Indian representative? If so, should this document is notarized?</p>	-	<p>Yes. Notarisation to be done in India.</p>
30	-	<p>Request for extension of End Date for submission of bid</p>	-	<p>Query: Request to extend the End Date for submission of bid till end of October.</p> <p>Response: May reach out to us few days before the deadline to extend the End Date, with reasonable time.</p>

- All above points are noted and agreed by the firm.
- a. These minutes of pre-bid meeting shall form the part of bid document/Agreement.
 - b. Rest of the terms and conditions and specifications of the bid document shall continue to remain same.
 - c. The above amendments/ clarifications are issued for the information for all the intending bidders.
 - d. The submission of bid by the firm shall be construed to be in conformity to the bid document, Corrigendum and amendments/ clarifications given above.